

EXHIBIT H

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION**

IN RE: ETHICON, INC., PELVIC REPAIR SYSTEM PRODUCTS LIABILITY LITIGATION	<p style="text-align: center;">Master File No. 2:12-MD-02327 MDL 2327</p> <p style="text-align: center;">JOSEPH R. GOODWIN U.S. DISTRICT JUDGE</p>
THIS DOCUMENT RELATES TO: <i>Wave 1 Cases</i>	

EXPERT REPORT OF TERI LONGACRE, MD

I. BACKGROUND AND QUALIFICATIONS

I am a board certified diagnostic surgical pathologist at Stanford Medicine with subspecialty expertise in gynecologic pathology. I received undergraduate degrees in the liberal arts (B.A.) at St. John's College in Santa Fe, New Mexico and in biology (B.S.) at the University of New Mexico in Albuquerque, New Mexico. I subsequently received my M.D. in 1985, also at University of New Mexico. I trained in Anatomic and Clinical Pathology at the University of New Mexico, followed by a surgical pathology fellowship at Stanford University. Thereafter I took a position as Assistant Professor at Stanford University and rose through the ranks of the professoriate at Stanford University, where I currently hold a position as Professor of Pathology. I am the Director of Gynecologic Pathology and Director of the ACGME-approved fellowship in Gynecologic Pathology, a program which I founded in 2007. In addition, I am the Director of Gastrointestinal Pathology and Director of the ACGME-approved fellowship in Gastrointestinal Pathology, a program which I also founded in 2013. I am the Director of the Stanford Hospital Tissue Committee and a member of the Stanford Care Improvement Committee which oversees the quality of care in the hospital. In addition to many other extramural committee appointments, I am the President Elect of the Association of Directors of Anatomic and Surgical Pathology, in part due to my prior work as a Director of Surgical Pathology at Stanford.

I have internationally recognized expertise in nonneoplastic and neoplastic gynecologic pathology and have published extensively in the peer-reviewed medical literature on gynecologic pathology. I provide continuing medical educational lectures for practicing pathologists regionally, nationally and internationally in gynecologic pathology and am author of numerous review articles, book chapters and a textbook in gynecologic pathology. I also provide annual medical student, resident, and fellow lectures at Stanford Medicine in areas of nonneoplastic and neoplastic gynecologic pathology and examine gynecologic pathology specimens, including mesh explant specimens when submitted to pathology, on a routine basis. Because of my expertise in gynecologic pathology, I was invited to become a member of the American Board of Pathology test committee in order to provide gynecologic pathology questions for the certification exam for pathology residents as well as the maintenance of certification exam for practicing pathologists. I am a member of a number of pathology societies and editorial boards, a list of which is provided in the attached curriculum vitae.

My clinical diagnostic activities chiefly include examination of surgical gynecologic and gastrointestinal specimens, including small biopsies and large organ resections. My annual case volume amounts to 5,000 to 7,500 cases. In my role as a diagnostic surgical pathologist, I routinely provide clinical and pathologic consultations to physicians at Stanford Medicine; this entails macroscopic (gross) and microscopic review of specimens, review of relevant clinical information, and rendering diagnoses on the basis of this review. As I am board certified in clinical pathology, I am well equipped to integrate findings in the areas of chemistry, hematology, microbiology, immunology, molecular pathology and other special laboratory studies as they relate to my practice of gynecologic pathology. I am a regular participant in the Stanford Gynecologic Oncology Interdisciplinary Tumor Board as well as several Gastrointestinal Tumor Boards. In addition to the clinical work I provide for Stanford patients, I also receive requests for my consultative opinion from both pathologists and treating physicians regionally, nationally, and internationally.

My opinions that follow, which apply to Ethicon's TVT, TVT-O, TVT-Exact, TVT-Abbrevio, Prolift, and Prosima, are held to a reasonable degree of medical and scientific certainty. Attached to this report are my curriculum vitae (Ex. A), which sets out my education and training in detail and lists my peer-reviewed publications, committee appointments, invited and active grant funding; a list of the materials I reviewed for these cases and materials/exhibits which I will use to support my opinions (Ex. B.); and a list of cases where I have testified in the last four years (Ex. C). I expect to review the deposition transcripts of certain of plaintiffs' experts in this case and may further develop my opinions after having done so.

II. TVT MIDURETHRAL SLING MESH IMPLANT

Foreign material, however inert, when implanted into human tissue typically invokes an inflammatory response in the initial phase which can be associated with acute inflammation, but generally evolves into a more chronic tissue response, with associated

lymphocytes, mast cells, and macrophages. The macrophages may form multinucleated foreign body type giant cells in response to the foreign material and often remain closely associated to the foreign material. The response to TVT mesh is similar to this general response and is often also associated with a thin zone of fibrosis. Following the initial early tissue reaction, the acute inflammatory response typically disappears and the only remaining inflammatory cells are chronic inflammatory cells, consisting of lymphocytes, plasma cells, mast cells, macrophages, and occasionally, eosinophils. The macrophages generally arise from tissue monocytes. The term “chronic inflammation” denotes the shift in the type of inflammatory cells and is not necessarily meant to denote severity of inflammation.

The surrounding zone of fibrosis and response to mesh implantation allows integration of the tissue into the mesh. Numerous controlled studies, clinical trials, and animal studies support the concept that the pore size of the mesh (75 μm) allows entry of cells (neutrophils, lymphocytes, macrophages, fibroblasts, red blood cells, and foreign body multinucleated giant cells) with microcapillary formation to accomplish the integration process. The integration process facilitates vascularization of the tissue adjacent to the mesh material, allows nutrients to replenish the tissue, and prevents excessive mobility of the mesh material while retaining sufficient flexibility of the adjacent surrounding normal fibroconnective tissue. In summary, the TVT mesh initially evokes a mild acute inflammatory response, which subsides into minimal to mild chronic inflammation often with associated foreign body type macrophage response, and localized fibrosis, which allows integration of the mesh into the surrounding fibroconnective tissue. This is consistent with my experience with the mesh explants that I have examined at Stanford, including those removed for reasons unrelated to any symptoms relating to the mesh.

Factors that may impact integration of the mesh are similar to those factors that impact wound healing in general (diabetes, smoking, poor nutrition, age). The presence of inflammation in association with the mesh material represents a normal host response. Inflammation occurs with any surgical procedure even in the absence of mesh or other foreign material. Inflammation may also occur in absence of surgery. Chronic inflammation is considered a normal healing response and is a normal physiologic reaction to any implanted device. There exists a normal complement of chronic inflammatory type cells in normal mucosal and submucosal tissue and it is often these cells that are recruited to form the chronic inflammatory response in response to implantation of foreign material. Tissue reactions to injury may vary from patient to patient dependent on a variety of factors. For example, some people develop more fibrosis or form scar tissue more readily than others. Factors influencing the scope and/or severity of tissue reaction include the degree of tissue injury as well as an individual patient’s unique response to the injury (genetics, smoking, diabetes, etc.).

Polypropylene material has been used in most surgical specialties for over five decades, in millions of patients in the US. The TVT sling, with its macroporous, monofilament,

polypropylene mesh, has demonstrated long-term durability, safety, and efficacy up to 17 years. The 17-year data demonstrates a high cure rate and a very low complication rate; this low complication rate includes pain, dyspareunia, and mesh exposure, each of which occur in less than 5% of patients. Numerous scientific papers in respected peer-reviewed medical journals in the U.S. and the world support the use of mesh material as a treatment for stress urinary incontinence. Multiple randomized, controlled trials comparing types of midurethral sling procedures, and other established non-mesh procedures, have consistently demonstrated its clinical effectiveness and patient satisfaction.

Polypropylene mesh midurethral slings are the standard of care for the surgical treatment of stress urinary incontinence and represent the current state of the art treatment of this condition. This procedure has essentially replaced open and transvaginal suspension surgeries for uncomplicated stress urinary incontinence. There have been over 100 surgical procedures developed for the management of stress urinary incontinence and there is scientific evidence that the midurethral slings are associated with less pain, shorter hospitalization, faster return to usual activities, and reduced costs as compared to other historic procedures. Organizations of gynecologic surgeons continue to support the use of polypropylene mid-urethral slings for the treatment of stress urinary incontinence.

The FDA has stated that polypropylene is safe and effective in the treatment of stress urinary incontinence. In 2013, the FDA website stated: “The safety and effectiveness of multi-incision slings is well-established in clinical trials that followed patients for up to one year.”

There is no correlation between the degree of fibrosis and inflammation and the presence of pain and/or mesh exposure. In fact, midurethral sling explants removed due to voiding dysfunction demonstrate more inflammation than those that are removed for pain and/or mesh exposure. Moreover, the degree of fibrosis and foreign body giant cell reaction is similar whether the mesh is removed for pain or voiding dysfunction. The presence of a foreign body reaction is a normal tissue response to the mesh material and has been observed in the vaginal tissue in all patients who have undergone mesh placement. Based on my accumulated experience of mesh explant pathology specimens at Stanford Medicine, chronic inflammation, often with associated foreign body response in mesh explant material is an expected finding in mesh explants, including those that are removed for reasons other than pain or dyspareunia. There are no compelling data that document significant histologic findings in mesh explants from patients with symptoms (pain, exposure, voiding dysfunction, etc.) versus mesh explants from patients who are entirely asymptomatic. Moreover, the cumulative literature data on mesh explants does not enable a pathologist to reliably and reproducibly correlate the pathology findings in mesh explant material to any specific symptom. Although there are several studies that attempt to compare the histology findings in mesh material removed from symptomatic and asymptomatic patients, valid comparisons cannot be drawn and clinical pathologic correlations cannot be made on the basis of the current data. In particular, the presence of fibrous tissue is normal, expected

and seen in all patients regardless of the presence of pain and/or exposure. There is no reliable scientific basis to conclude fibrosis of mesh leads to complications, particularly pain. One recent study found no difference in fibrosis between patients with pain and those without pain.

Mesh integration into the surrounding vaginal tissue is key to adequate mesh function. Following mesh implantation, a fibrin matrix is established as a scaffold for further fibroconnective tissue collagen deposition, ingrowth of blood vessels. The new blood vessels and capillaries supply nutrients for the fibroconnective tissue, including the surrounding nerves and permit fibroblasts to synthesize collagen. The initial loose granulation tissue that is formed is gradually replaced by firmer fibrous tissue with contractile properties that serves as a pliable, but strong support structure for the implanted mesh. Wound contraction occurs naturally as a result of this process, aiming to minimize the volume of maturing scar and reapproximate the existing tissue to its normal pre-implant state. The pores in the mesh allow this process to proceed more effectively as they permit incorporation of the fibroblasts into the mesh material, resulting in a knitted or more integrated mesh which is anchored into the fibroconnective tissue. This provides flexibility as well as stability. The degree of mesh contraction is minimal and unlikely to be clinically significant. In fact, in vivo ultrasound assessment of midurethral slings suggests that shrinkage and compromise of the implanted mesh does not occur in the physiologic state. Apparent contraction or shrinkage of the mesh once it is removed from the body is due to normal retraction that occurs with any tensile tissue; tissue dehydration (if not properly fixed), tissue fixation and processing also contribute to contraction of the mesh following removal and this is not something that can be reliably detected on routine or polarized light microscopy.

Several studies, including some by Ethicon, have suggested there may be degradation of the mesh following implantation. These data, when taken in aggregate are not compelling arguments at this point in time. First, it is not clear that degradation occurs to any extent in vivo. Second, if it does, the clinical data do not provide any support that such degradation translates into any clinically significant effect on mesh function/dysfunction, pain, infection, erosion, or other potential side effects of mesh implantation. The degradation data is largely based on ex vivo studies and the use of histology using routine and polarizing methods. The histologic appearance and apparent change in the staining properties of the mesh material is not an adequate or scientifically accepted method to assess degradation of materials. Plaintiffs' pathology expert, as a pathologist, has not presented scientifically reliable evidence sufficient to assess the molecular structure of substances.

Plaintiffs' pathology expert asserts mesh migration and mesh deformation can be identified by histopathologic examination of mesh explant tissue. This issue is best left to the surgeon – not pathologists after the mesh has been removed. Mesh material, as well as normal human tissue can change shape, fold, and “curl” following removal from the body, but this cannot be reliably shown to reflect an altered shape or “curling” while it is in the body. In fact, it is far more likely

to result from the removal procedure when it is being separated from the surrounding tissue with which it is integrated.

The presence of nerve twigs is normal and expected in this region and is desired in the integrated mesh material as it reflects full integration. The purpose of innervation in the vaginal area is multifold, but it is chiefly autonomic (i.e., not voluntary motor or sensory in the sense of pain sensation), and so the presence of nerves or nerve twigs in and around the mesh material does not necessarily (and in fact is unlikely to) reflect the presence of increased pain sensation.

There is a well-documented risk of infection following any surgical procedure and/or implantation of foreign material. The proliferation and subsequent maintenance of small capillaries – which is part of the initial inflammatory response – is important in the prevention of infection as this provides a source for supply of cells and nutrients including oxygen to the mesh, as well as removal of cellular debris. The macroporous, monofilament properties of TVT mesh facilitate the body in clearing bacteria and other infectious agents in order to minimize this risk of infection. The rate of infection with TVT is low.

There are a variety of theories to explain pain and there are medical doctors who have scientific expertise in this area and who are specifically trained to treat patients with pain.

This area of medicine is not part of routine anatomic or clinical pathology and generally lies outside the expertise of the anatomic surgical pathologist. In absence of a reliable evidence base tying histologic changes to complications, it is disingenuous and misleading to render definitive statements about innervation of mesh material and resultant pain with respect to the pathologic examination of mesh explant material. Moreover, although anatomic pathologists do examine tissue containing nerves and nerve twigs during routine practice, the assessment of subtle neural damage, neural injury, abnormal neural growth, and neurovascular bundles cannot typically be correlated to a patient's symptoms.

Summary Opinion

Polypropylene mesh midurethral slings are the standard of care for the surgical treatment of stress urinary incontinence and represent the current state of the art treatment of this condition. The FDA has concluded that polypropylene mesh is safe and effective in the treatment of stress urinary incontinence. As with any surgical procedure that involves implantation of foreign material into the human body, there is a small (significantly less than 5% overall) well known and well documented complication rate that has been associated with polypropylene mesh midurethral slings. This complication rate is less than that which has been associated with other surgical sling procedures that do not utilize mesh. Moreover, the surgical recovery rate and efficacy is better for polypropylene mesh midurethral slings than for the historical surgical procedures that were used prior to the development of the polypropylene sling.

As with any foreign material, however inert, polypropylene mesh acts as a foreign object and the body mounts an active foreign body reaction to the mesh at the time of implantation. This is a normal response and stabilizes once the mesh integration has occurred. Residual evidence of the reaction is present at the time of mesh explantation and this can be seen on histologic evaluation of the mesh. The degree of foreign body reaction and fibrosis in response to the mesh is typically minimal (mild to focally moderate at most) and is similar to that seen in the tissue in association with removal of any foreign material and is seen in all patients, whether that material is functional or nonfunctional or whether the patient is experiencing pain or no pain. In other words, the degree of inflammation and/or fibrosis cannot be used to predict or correlate symptoms in any individual patient.

The mesh itself, as a foreign object, and the body reaction to the mesh do not significantly damage the tissues in this anatomical location. For good functioning, it is desirable that the mesh be integrated into the adjacent tissue. After implantation, the innervation and vascular supply are restored through and/or around the mesh to facilitate integration. The integration process involves formation of a thin fibrous scar and a foreign body reaction, which when stabilized over the course of several weeks, allows the mesh to conform to the normal structures at that site and provide needed strength to prevent incontinence. The ingrowth of vessels and nerve innervation allows the tissue adjacent to the mesh to remain viable and functional.

While scar formation does occur, it is typically minimal and does not lead to deformation of the mesh.

The presence of nerve fibers and twigs in the area near and adjacent to the mesh reflects healthy tissue and healthy mesh integration. Since most nerve fibers in this area are autonomic, (and do not carry pain stimuli) their presence in the histologic sections of explanted mesh does not imply increased risk for pain; nor do they correlate with actual increased pain sensation. I have not encountered traumatic neuromas (which may be associated with pain) in mesh explants. Occasionally, mesh explants may contain foci of neural ganglia. This is not uncommon in tissue that is surgically excised from this site for other reasons – as this is a site that contains nerve ganglia – and is not necessarily a reflection of impaired nerve functioning. Neural ganglia in peripheral tissues are associated with the autonomic nervous system.

Mesh erosion with TVT slings is a rare complication – this is a known complication. Mesh erosion is likely due to a multitude of factors including infection, inherent poor vascular supply, and poor or impaired wound healing, etc.

The degree of inflammation is minimal (mild to focally moderate at most) in mesh slings once integration is complete and this degree of inflammation has no known correlation with the perception of pain. Tissue edema is also minimal once integration has occurred.

Mesh migration, folding and curling may rarely occur but this is documented by the surgeon and cannot be identified on the basis of examination of removed mesh – either on macroscopic or microscopic evaluation.

Conclusions about the presence of folding or curling of explanted mesh are based on an erroneous assumption that the configuration of the tissue and mesh removed from the supporting connective tissue in a patient accurately reflects the configuration of the tissue and mesh while in the body. It is well known that tissue retracts, contracts, folds and curls to varying degrees immediately following surgical removal as a result of loss of the surrounding supporting connective tissue that is essentially holding it in place. This retraction and contraction also applies to tissue that contains polypropylene mesh. The resulting configuration of the mesh material once it is removed from a patient depends on the manner in which it is removed, the amount that is removed, the integrity of the mesh material that is removed (i.e., partial mesh versus entire width), and the treatment following removal. If the mesh material is not placed in fixative immediately following removal and pinned out on cork board, the attached tissue may desiccate, causing artefactual distortion of the tissue as well as the mesh. The sectioning of the mesh explant – including that by scalpel as well as by microtome may further art factually distort the tissue and mesh material. The process of embedding the tissue and mesh into paraffin may create a plane of sectioning that is distorted and does not reflect the plane of the mesh when positioned in the body.

The pathologic examination of mesh explant material provides important information: (1) documentation that mesh was removed; (2) information as to whether or not there is concomitant infection and/or abscess that requires further treatment; and (3) documentation that other vital tissue was not removed (i.e, ureter, bladder wall, etc). The histopathologic evaluation of mesh explant material is not capable of identifying causes of pain, dyspareunia, or incontinence. In addition, the histopathologic examination of explanted mesh is not the method to be used to determine mesh cracking, degradation, twisting, or curling.

III. PELVIC ORGAN PROLAPSE MESH IMPLANTS

Although the quality of evidence is low to moderate (largely due to poor reporting and absence of large scale follow up studies), vaginal pelvic organ prolapse mesh is associated with slightly lower rates of awareness of prolapse, reoperation for prolapse, and recurrent prolapse on

examination, but slightly higher rate for reoperation due to prolapse, urinary incontinence, and mesh exposure when compared to native tissue repair. Mesh exposure appears to be the most common complication with pelvic organ prolapse mesh and this rate is higher than that seen with mid-urethral slings. Pelvic pain and dyspareunia are common complaints after prolapse surgery whether by transvaginal mesh repair for apical prolapse, laparoscopic sacrocolpopexy, or abdominal sacrocolpopexy.

Ethicon's pelvic organ prolapse mesh (Prolift and Prosima) contains fibers that are thinner (80-90 microns versus 120-150 microns) and contains a larger pore size (2.4 x 1.7 mm versus 1379 microns) when compared to the mesh used in mid-urethral slings. However, the host response to the implantation of Ethicon's pelvic organ prolapse mesh (Prolift and Prosima) is identical to that which occurs with Ethicon's TVT slings. In brief, the implanted mesh evokes an inflammatory response in the initial phase which can be associated with acute inflammation, but generally evolves into a more chronic tissue response, with associated lymphocytes, mast cells, and macrophages. The macrophages often form multinucleated foreign body type giant cells in response to the foreign material and often remain closely associated to the foreign material. Following the initial early tissue reaction, the acute inflammatory response typically disappears and the only remaining inflammatory cells are chronic inflammatory cells, consisting of lymphocytes, plasma cells, mast cells, macrophages (including foreign body type multinucleated giant cells), and occasionally, eosinophils.

Since the host response is similar for both mesh materials, the histologically observed inflammatory response, including giant cells and fibrous tissue ingrowth cannot be attributed to the observed higher complication rates associated with the pelvic organ prolapse mesh. Moreover, the issues identified in my report with respect to the purported degradation that occurs in vivo with mid-urethral sling mesh material are equally applicable to the pelvic organ prolapse mesh material.

IV. RESPONSE TO PLAINTIFF'S EXPERT OPINIONS AND PHOTOGRAPHS

The pathology photographs that are contained in the plaintiffs' experts' (Dr. Iakovlev) general report are limited by (1) absence of information about how immunostains were performed (antibody, titer, positive/negative controls, CLIA laboratory) (2) focus on specific areas without a low magnification image to identify site that is shown at higher magnification, (3) the use of yellow coloring in areas of prior mesh material and other apparent color alteration of images, (4) absence of paired H&E and immunohistochemical stained slides, (5) and incorrect magnifications. In addition, he repeatedly identifies "normal tissue" as fat or adipose tissue without recognizing that other normal tissues are present in many of the figures – including normal tissue in areas he identifies as "scar" or "edema". Specific comments are as follows:

Dr. Iakovlev's observations concerning polypropylene degradation in vivo are incomplete and not compelling. Microscopic examination of explanted mesh with the use of histochemical dyes and polarizing microscopy is not a scientifically appropriate method to study degradation or deformation of foreign material. These evaluation procedures are designed to study human tissue – in particular the chemical dyes that are used are designed to highlight acidic nucleic acids and basic proteins -and are based on the formation of chemical bonds. The use of immunohistochemistry (S100, myeloperoxidase, etc.) is designed to identify cell types and is not utilized for evaluation of extracellular substances. Extracellular matrix may take on artefactual staining with a variety of immunohistochemical stains, particularly along tissue edges (so-called edge effect) and along the edges of foreign materials and such reactivity cannot be interpreted as evidence for the presence of a specific reaction.

The surgical process for the removal of integrated mesh from a patient often requires pulling of the material with blunt and sharp dissection, which may cause distortion in the macroscopic and microscopic appearance of the mesh material. Additional distortion of the material occurs as a result of electrocauterization to prevent bleeding during the surgical removal. During the subsequent processing of mesh explant material for preparation of histologic slides, the mesh is exposed to formalin, varying thermal conditions, and solvents, including xylene. This processing is necessary in order to cross-link cell proteins for tissue stabilization and sectioning. However, it also alters the histologic staining and refractile properties of the mesh material in a similar manner to that which has been attributed to in vivo degradation.

Figure Set 1. The photographs show the presence of chronic inflammation and foreign body giant cell reaction around mesh spaces and fibers. The infiltrate is mild to focally moderate and limited to the immediate vicinity of the fibers. The “scar” area labeled in Figure 1b is normal tissue. The chronic inflammation, foreign body response, and scar areas that are depicted are limited to the mesh spaces and fibers, and are a normal and expected host response.

Figure Set 2. These photographs depict similar findings to those in Figure 1 and are normal and expected host responses. There is no “scar encapsulation”. The mesh provides a scaffold for the deposition of collagen to provide strength and support to the surrounding connective tissue. Much of the tissue labeled as “scar” in 2b - 2e is normal fibroconnective tissue that contains small vessels. Normal pelvic floor tissue consists of fibrous tissue as well as adipose tissue. In 2g, the smooth muscle actin stain that has been performed to show the presence of smooth muscle depicts muscle and what appear to be small blood vessels in the area of “bridging fibrosis”. This indicates normal tissue and not scar. The term “bridging fibrosis” is used in the area of liver pathology and is not a generally accepted term in the area of soft tissue fibrosis or scar formation.

Figure Set 3. These photographs show nerves and ganglia adjacent to mesh spaces and fibers. The nerves do not exhibit degeneration. No traumatic neuroma is present. A traumatic neuroma consists of nerves with axonal sprouting and surrounding perineural fibrosis. The photographs depicted in this set do not demonstrate axonal sprouting or significant fibrosis. Although several of the nerves are curved and thus appear to be distorted, this is likely due to manipulation of the mesh during removal or during histologic processing and sectioning (i.e., artifact). The foreign body response is limited around the mesh fibers and spaces and there is no inflammatory infiltrate in proximity to the nerves. The presence of nerves that appear histologically normal in between areas where mesh fibers are encountered indicate the restoration of normal connective tissue, which is the expected and desired effect. S100 immunostaining is a useful immunohistochemical stain to identify neural tissue, but discontinuity of staining is common and does not reflect neural injury. It is likely that the incision during placement of the mesh cuts through nerves on occasion, but once the tissues heal, the nerves also reapproximate around the mesh fiber. It is not possible to determine on the basis of morphology alone any related clinical symptoms. Furthermore, the presence of ganglia associated with these nerves indicates that the nerves are autonomic in nature and do not transmit pain sensation.

Figure Set 4. These figures depict normal nerves containing ganglion cells. The ganglion cells indicate the nerves associated with them are autonomic (not sensory). There is no histologic or pathologic evidence that the nerves or ganglia are affected by the mesh.

Figure 5. The figure depicts normal mucosa and normal submucosa with normal pattern of innervation. The mesh spaces/fibers at the bottom of the figure are associated with a normal and expected chronic inflammatory response.

Figure Set 6. These figures depict normal blood vessels that typically occur in vaginal submucosa. There is no indication that these blood vessels are dilated or congested. The areas that are designated as “edematous” or as “edema” are normal, loose fibroconnective tissue. In any event, the presence of mild edema, mild vascular congestion and mild vascular dilatation can be seen in the context of surgery and reflect a recent event – not a chronic process. “Fluid bubbles” is not a standard histologic or pathologic term.

Figure Set 7. This set of figures shows mesh material adjacent to skeletal (striated) muscle, adipose tissue, fibrous tissue, and nerves. Figures 7a and 7b are poor quality and it is not possible to determine at this magnification whether the striated muscle is scarred. In addition to having been modified by computer, the magnification is too low to evaluate the status of the muscle fibers. Striated muscle is normally present in this area and since the mesh is placed in an area that is weakened in pelvic organ prolapse, repair of this area using mesh explains these photos. There is no significant inflammation associated with the striated muscle to indicate an adverse effect. The presence of histologically normal nerves in this area indicates normal innervation and integration of the mesh and adjacent tissue. Figure 7c depicts muscle atrophy with intervening

fibrous tissue in absence of mesh material. The S-100 stain highlights the presence of nerve fibers while desmin appears to highlight muscle fibers. There is no evidence of nerve or muscle damage at this magnification. It is not clear what is meant by the term “mesh scar plate” in these figures as much of the area that is so designated appears to represent normal fibroconnective tissue.

Figure Set 8. – These figures show mesh spaces and fibers with the mild and expected foreign body giant cell reaction. Normal fibroconnective tissue is also present. The smooth muscle actin stains are difficult to interpret due to high background staining. There is no evidence of a pathologic effect on these tissues.

Figure Set 9. This figure set is particularly problematic in terms of interpretation. They appear to depict a small caliber blood vessel that has undergone partial obliteration, but there is no obvious thrombus and part of the vessel appears to be collapsed as opposed to occluded. The damage is likely secondary to surgery. There is no vasculitis. An EVG stain should be used to demonstrate vascular thrombosis and/or vessel wall damage. The “capillary thrombosis” in Figure 9b appears to represent fibrin and sludging as opposed to a true thrombus; it appears recent and likely secondary to surgical excision of the mesh.

Figure Set 10. These figures that purport to demonstrate curling and folding of the mesh material are fanciful at best. Some of the areas labeled as “scar” appear to be normal dense fibroconnective tissue containing normal vessels and nerves. The apparent “folding” and “curling” (macroscopically or microscopically) of mesh material after it has been excised does not provide information regarding the status of the mesh in vivo. This is especially true given the manipulation during surgical removal and subsequent sectioning and processing of the mesh explant. Dr. Iakovlev’s computer altered yellow colorations are purely speculative. .

Figure Sets 11 and 12. These figures depict vaginal mucosal mesh erosion. Erosion is a well-known, but rare complication of a midurethral sling. The findings are expected and normal when erosion occurs. Bacterial colonization may occur – the vaginal mucosa is not sterile – but the figure is taken at too low of a magnification to identify bacterial colonies. Atrophy and mucosal erosion may occur in the vagina in postmenopausal women without mesh implants. These non-mesh erosions may also be associated with bacterial colonization.

Figure Sets 13-19. These figures purport to demonstrate polypropylene degradation that occurs in vivo. However, there is no reliable evidence that the “cracking” and “fragmentation” occurred in vivo and there is no evidence that if it did, it is of any clinical significance. In many areas purported to show degradation, there is no nearby inflammation.

Figure Set 20. The presence of dystrophic calcification may occur in a variety of settings, in the absence of prior surgery, as well as in absence of foreign material. In this case, the dystrophic calcifications are more likely a result of prior surgery. Scattered dystrophic calcifications are rarely, if ever, associated with adverse effects.

V. COMPENSATION

My hourly rate for work in this case is \$500 per hour.

VI. REFERENCES

Woodruff AJ, et al. Histologic comparison of pubovaginal sling graft materials: a comparative study. *Urology* 2008; 72:85-89.

Huffaker RK, et al. Histologic response of porcine collagen-coated and uncoated polypropylene grafts in a rabbit vagina model. *Am J Obstet Gynecol* 2008; 198:582.e1-582.e7.

Boulanger L. Tissue integration and tolerance to meshes used in gynecologic surgery: an experimental study. *Eur J Obstet Gynecol Reprod Biol* 2006; 125: 103-108.

Boulanger L. Bacteriological analysis of meshes removed for complications after surgical management of urinary incontinence or pelvic organ prolapse. *Int Urogynecol J* 2008; 19:827- 831.

Engelsman AF. In vivo evaluation of bacterial infection involving morphologically different surgical meshes. *Ann Surg* 2010; 251:133-137.

Nilsson CG. Seventeen years' follow-up of the tension-free vaginal tape procedure for female stress urinary incontinence. *Int Urogynecol J* 2013; 24:1265- 9.

Serati M. Tension-free Vaginal tape for the treatment of urodynamic stress incontinence: efficacy and adverse effects at 10-year follow-up. *Eur Urol* 2012; 61: 939- 946.

Abbel-fattah M. Prospective randomised controlled trial of transobturator tapes in management of urodynamic stress incontinence in women: 3-year outcomes from the Evaluation of Transobturator Tapes Study. *Eur Urol* 2012; 62:843- 851.

Tincello DG. The TVT Worldwide Observational Registry for Long-Term Data. Safety and efficacy of suburethral sling insertion approaches for stress urinary incontinence in women. *J Urol* 2011; 186:2310- 2315.

Olsson I. Long-term efficacy of the tension-free vaginal tape procedure for the treatment of urinary incontinence. *Int Urogynecol J* 2010; 21:679- 683.

Cox A, et al. Surgical management of female SUI: is there a gold standard? *Nat Rev Urol*. 2013;10:78-89.

Ford AA, Ogah JA. Retropubic or transobturator mid-urethral slings for intrinsic sphincter deficiency-related stress urinary incontinence in women: a systematic review and meta-analysis. [Int J Urogynecol](#). 2015 Jul 29. [Epub ahead of print]

Schimpf MO, Rahn DD, Wheeler TL, et al. Sling surgery for stress urinary incontinence in women: a systematic review and metaanalysis. *Am J Obstet Gynecol.* 2014; 211:71.e1-71.e27.

Richter H. et al. Retropubic versus transobturator midurethral slings for stress incontinence. *N Engl J Med.* 2010; 362:2066-76.

Falconer C. Influence of different sling materials on connective tissue metabolism in stress urinary incontinence. *Int Urogynecol J* 2001;12 (Suppl 2): S19-S23.

Elmer C. Histological inflammatory response to transvaginal polypropylene mesh for pelvic mesh reconstruction. *J Urol* 2009; 181: 1189-1195.

Hutchinson R. An exploratory 91-day tissue reaction study of polypropylene-based surgical mesh in rats (PSE ACC. No. 00-0035). July 2001.

Moalli PA. Tensile properties of five commonly used mid-urethral slings relative to the TVT. *Int Urogynecol J* 2008; 19: 655-663.

Lo TS, Horng SG, Liang CC, et al. Ultrasound assessment of mid-urethra tape at three-year follow-up after tension-free vaginal tape procedure. *Urology* 2004; 63:671-675.

Dietz HP, Mouritsen L, Ellis G, et al. Does the tension-free vaginal tape stay where you put it? *Am J Obstet Gynecol* 2003; 188:950-953.

Hill AJ, Unger CA, Soloman ER, et al. Histopathology of excised midurethral sling mesh. *Int Urogynecol J* 2015; 26:591-595.

Klosterhalfen B et al. Influence of implantation interval on the long-term biocompatibility of surgical mesh. *Br J Surg.* 2002; 89(8):1043-8.

AUGS/SUFU Position Statement, 2014.

Maher C, Feiner B, Baessler K, Christmann-Schmid C et al. Transvaginal mesh or grafts compared with native tissue repair for vaginal prolapse (Review). *Cochrane Collaboration* 2016.

Gad N, Duvvuru A, Burchgart B. Outcome of Prolift mesh repair in treatment of pelvic organ prolapse and its effect on lower urinary tract symptoms: 5-year retrospective case study. *J. Obstet. Gynaecol. Res.* 2013;39(1):243-9.

Jacquetin B, Hinoul P, Gauld J, Fatton B et al.. Total transvaginal mesh (TVM) technique for treatment of pelvic organ prolapse: a 5-year prospective follow-up study. *Int. Urogynecol. J.* 2013; 24:1679–1686.

Khan Z, Thomas L, Emory SJ. Outcomes and complications of trans-vaginal mesh repair using the Prolift kit for pelvic organ prolapse at 4 years median follow-up in a tertiary referral centre. *Arch. Gynecol. Obstet.* 2014; 290:1151-1157.

Bendavid R et al. A mechanism of mesh-related post-herniorrhaphy neuralgia. *Hernia* 2015; Nov 15 [Epub ahead of print].

Nieminen K et al. Outcomes after anterior vaginal wall repair with mesh: a randomized, controlled trial with a 3 year follow-up. *Am. J. Obstet. Gynecol.* 2010; 203:235.e1-8.

Withagen M et al. Trocar-guided mesh compared with conventional vaginal repair in recurrent prolapse. *Obstet. & Gynecol.* 2011; 117(2):242-250.

A handwritten signature in black ink, appearing to read 'Long', with a long horizontal flourish extending to the right.

Dated: March 2, 2016

Teri Longacre, MD

CURRICULUM VITAE

PERSONAL DATA

Name: **Teri A. Longacre, M.D.**

Place of Birth: [REDACTED]

Citizenship: U.S.A.

Spouse: [REDACTED]

Children: [REDACTED]

E-mail: [REDACTED]

Telephone: [REDACTED]

EDUCATIONAL BACKGROUND

1972-1976	St. John's College, Santa Fe, New Mexico, B.A., Liberal Arts
1976-1980	University of New Mexico, Albuquerque, New Mexico, B.S., Biology
1981-1985	University of New Mexico School of Medicine, Albuquerque, New Mexico, M.D. (Degree awarded in December, 1985)

POSTGRADUATE EDUCATION

1980-1981	Research Assistant (S.A. Bartow, M.D.), University of New Mexico School of Medicine, Albuquerque, New Mexico
1983-1984	Fellowship in Pathology, Post-Graduate Year II, University of New Mexico School of Medicine, Albuquerque, New Mexico
1986-1987	Resident in Pathology, University of New Mexico Hospital, Albuquerque, New Mexico
1987-1988	Fellow in Hematopathology, University of New Mexico Hospital, Albuquerque, New Mexico
1988-1989	Research Fellow in Gastroenterology, University of New Mexico Hospital, Albuquerque, New Mexico
1989-1990	Resident in Pathology, University of New Mexico Hospital, Albuquerque, New Mexico
1990-1991	Fellow in Surgical Pathology, Stanford University Hospital, Stanford, California
2004	Leadership Development for Physicians in Academic Health Centers, Harvard School of Public Health, Boston, Massachusetts
2005-2006	Stanford Physician Leadership Development Program, Stanford University School of Medicine, Stanford, California
2010-2011	Breast Prognostic Factors Testing, College of American Pathology, Chicago, Illinois

ACADEMIC APPOINTMENTS

1991-1993	Clinical Instructor and Staff Physician, Department of Pathology, Stanford University Medical Center, Stanford, California
1993-1999	Assistant Professor of Pathology, Department of Pathology, Stanford University Medical Center, Stanford, California
1999-	Associate Professor of Pathology, Department of Pathology, Stanford University Medical Center, Stanford, California
2008-	Professor, Department of Pathology, Stanford University Medical Center Stanford, California

LICENSURE

1989	New Mexico, #89-123 (currently inactive)
1990	California, HG-069115
2011	Nevada, 14213

BOARD CERTIFICATION

1989	Diplomate, American Board of Medical Examiners
1991	Diplomate, American Board of Pathology, Anatomic and Clinical Pathology
2014	Voluntary Recertification, American Board of Pathology, Anatomic and Clinical Pathology

PROFESSIONAL MEMBERSHIPS

1990-	U.S. and Canadian International Academy of Pathologists
1996-	International Society of Gynecological Pathologists
1996-	South Bay Pathology Society
1997-	American Society of Clinical Pathologists
1997	International Society of Breast Pathology
1999	Gynecologic Oncology Group
2004	American Society of Clinical Oncology
2005-	College of American Pathologists
2006-	California Society of Pathologists
2007-	International Gynecologic Cancer Society
2008-	Arthur Purdy Stout Society
2010-	Association of Directors of Anatomic Surgical Pathology
2013-	The Rodger C. Haggitt Gastrointestinal Pathology Society

ADMINISTRATIVE AND SCIENTIFIC COMMITTEE APPOINTMENTS

1993-1994	Abstract Review Board, Gastrointestinal Pathology, United States and Canadian Academy of Pathologists
1994-2009	Admissions Panel, Stanford University School of Medicine, Stanford, California
1996-2008	Pathology Working Group Committee, National Cancer Institute, Breast

and Ovarian Cancer Family Registry

2000-2001 Strategic Planning Committee on Research Space, Department of Pathology, Stanford University School of Medicine, Stanford, California

2000-2003 Alternate Senator, Faculty Senate, Stanford University School of Medicine, Stanford, California

2001-2009 Committee on Admissions, Stanford University School of Medicine, Stanford, California

2001-2002 Chair, Hematopathology Search Committee, Department of Pathology, Stanford University, Stanford, California

2001-2002 Committee on Women in Medicine and Science, Stanford University School of Medicine, Stanford, California

2001-2010 Co-Chair, Residency Selection Committee, Department of Pathology, Stanford University, Stanford, California

2002-2003 Renal Pathology Search Committee, Department of Pathology, Stanford University, Stanford, California

2001- Adjunct Clinical Faculty Appointments and Promotions Committee, Department of Pathology, Stanford University, Stanford, California

2002-2004 Course Director, Surgical Pathology Clerkship 302A, Stanford University School of Medicine, Stanford, California

2002-2010 Associate Director, Residency Training Program, Department of Pathology, Stanford University, Stanford, California

2003-2008 Chair, Pediatric Pathology Search Committee, Department of Pathology, Stanford University, Stanford, California

2002-2009 Course Co-Director, Current Issues in Anatomic Pathology, University of San Francisco-Stanford Postgraduate Course, San Francisco, California

2004-2011 Associate Director of Surgical Pathology, Department of Pathology, Stanford University, Stanford, California

2004-2005 Co-Director, Women's Health Module, Human Health & Disease 223, Stanford University School of Medicine

2002-2003 Longitudinal Committee on Medical Education, Subcommittee on Admissions, Stanford University School of Medicine, Stanford, California

2005-2011 Cancer Care Committee, Stanford Comprehensive Cancer Center, Stanford, California

2005- American Board of Pathology Test Development and Advisory Committee, The American Board of Pathology, Tampa, Florida

2005-2010 Associate Chair of Pathology for Residency Training, Department of Pathology, Stanford University, Stanford, California

2006-2007 Gynecologic Oncology Search Committee, Department of Gynecology, Stanford University, Stanford, California

2006- Associate Member, Stanford Comprehensive Cancer Center, Stanford, California

2006-2012 Breast Oncology Program Director Search Committee, Stanford Comprehensive Cancer Center, Stanford, California

2007- Gynecological Cancer Protocol Review Panel, College of American Pathologists

2007- Education Committee, California Society of Pathologists

2007-	Director, Gynecologic and Breast Pathology Fellowship
2007-	Director, Gynecologic Pathology
2007-2011	Neuropathology Search Committee, Department of Pathology, Stanford University, Stanford, California
2007-2014	Treasurer, International Society of Gynecological Pathologists
2007-2013	Institutional Review Board, Stanford University School of Medicine, Stanford, California
2007-2008	Task Force on Industry Support of CME, Stanford University School of Medicine, Stanford, California
2008-	Chair, Quality Improvement Committee (PPEC), Department of Pathology, Stanford University School of Medicine, Stanford, California
2008-2012	National Cancer Institute, Breast Cancer Family Registry, Biospecimen Working Group
2009-	Medical Director, MOHS Pathology Laboratory, Stanford Medicine Outreach Clinic, Stanford University Hospital and Clinics, Redwood City, California
2009-	AANCART California Biorepository Research Network
2009-2014	Arthur Purdy Stout Society Prize and Awards Committee, Arthur Purdy Stout Society
2010-	Council, Association of Directors of Anatomic Surgical Pathology
2010-2012	Co-Director of Surgical Pathology, Department of Pathology, Stanford University, Stanford, California
2011-	Ambassador, United States and Canadian Academy of Pathology
2011-2014	Tissue Committee, Lucile Packard Children's Hospital, Stanford, California
2011-	Care Improvement Committee, Stanford University Hospital, Stanford, California
2011-	Director, Gastrointestinal Pathology
2011-2012	Physicianship and Leadership Working Group, Transforming Medical Education Initiative, Stanford School of Medicine, Stanford, California
2012	CAP/ASCCP Lower Anogenital Squamous Terminology (LAST) Consensus Statement Independent Review Panel
2012-	Director, Stanford Tissue Procurement Facility, Stanford Cancer Center
2012	Gynecologic Pathology Search Committee, Department of Pathology, Stanford University, Stanford, California
2012-	Senator-at-Large, Stanford Medical School Faculty Senate, Stanford University, Stanford, California
2012	Councilor, International Academy of Pathology, US-Canadian Division
2013	Molecular Therapeutics in Gynecologic Oncology Search Committee, Division of Gynecologic Oncology, Department of Obstetrics and Gynecology and Division of Radiation & Cancer Biology, Department of Radiation Oncology, Stanford, California
2013	World Health Organization Tumors of the Female Genital Tract Consensus Meeting, Lyon, France
2013-	Endometrial Cancer Biomarker Reporting Panel, College of American Pathologists

2013- Delegate to the California Delegation, College of American Pathologists House of Delegates
 2013- Scientific Advisory Board, Stop GCT, Ovarian Cancer Research Foundation
 2013- Director, Gastrointestinal Pathology Fellowship
 2014- President Elect, Association of Directors of Anatomic and Surgical Pathology
 2014- Education Committee, International Society of Gynecological Pathologists
 2014- Cancer Biomarker Reporting Committee, College of American Pathologists
 2014- Molecular Oncology Tumor Board, ASCO University and College of American Pathologists
 2014- Co-Chair, Stanford Hospital Tissue Committee, Stanford Health Care, Stanford, California
 2014- Action Group: Pathology Practice Guidance, College of American Pathologists
 2014- Chair, Endometrial Cancer Biomarker Reporting Panel, College of American Pathologists
 2014 Faculty Search Committee, Department of Pathology, Stanford, California
 2014 Councilor, International Academy of Pathology, US-Canadian Division

EDITORIAL BOARD

1993- Advances in Anatomic Pathology
 1993-2001 Advances in Gastroenterology, Hepatology and Clinical Nutrition
 1996- International Journal of Gynecological Pathology
 2003- Applied Immunohistochemistry and Molecular Morphology
 2005- American Journal of Surgical Pathology
 2009- Associate Editor, Digestive Diseases and Sciences, Stanford Multidisciplinary Seminars
 2009- Pathology Research International
 2009- Modern Pathology
 2009- PathXchange Editorial Panel
 2013- Pathology Discovery (Senior Editor)
 2013- Seminars in Diagnostic Pathology
 2014- PLoS ONE

Journal Ad Hoc Reviewer:

American Journal of Gastroenterology
 American Journal of Obstetrics and Gynecology
 Annals of Oncology
 Archives of Pathology and Laboratory Medicine
 BMC Cancer

BMC Gastroenterology
 British Journal of Cancer
 Cancer
 Cancer Epidemiology, Biomarkers and Prevention
 Cancer Research
 Clinical Medicine-Pathology
 Clinical Microbiology and Infection
 Expert Review of Anticancer Therapy
 Gastrointestinal Cancer: Targets and Therapy
 Gut
 Gynecologic Oncology
 Human Pathology
 International Journal of Gynecological Cancer
 International Journal of Medical Sciences
 Journal of Clinical Oncology
 Journal of Pathology
 Journal of Reproductive Medicine
 Journal of Zhejiang University-SCIENCE B
 Medical Science Monitor
 Molecular and Cellular Biology
 Molecular Cancer Therapeutics
 Obstetrics and Gynecology International
 Oncogene
 The Lancet
 Virchows Archives
 World Journal of Surgical Oncology

External Grant Reviewer:

American Institute of Biological Sciences
 Dutch Cancer Society
 French National Cancer Institute
 Irish Health Research Board
 Italian Association for Cancer Research
 Physicians' Services Incorporated Foundation
 Qatar National Research Fund

HONORS AND AWARDS

1984	Khatali Award in Recognition of an Outstanding Medical Student, University of New Mexico School of Medicine, Albuquerque, New Mexico
1984	Faculty Award of Excellence, University of New Mexico School of Medicine, Albuquerque, New Mexico
1984	Gordon Award in Pathology, University of New Mexico School of Medicine, Albuquerque, New Mexico

1994	Katharine McCormick Faculty Award, Stanford University Medical Center
1996	American Cancer Society Clinical Oncology Career Development Award
1996	American Cancer Society Institutional Research Grant
2003	Service Award for Academic Advising, Undergraduate Advising Center, Stanford University, Stanford, California
2010	Excellence in Teaching, Women's Health Unit, Human Health and Disease, Stanford University School of Medicine, Stanford, California
2012	Excellence in Teaching, Women's Health Unit, Human Health and Disease, Stanford University School of Medicine, Stanford, California

TEACHING ACTIVITIES

1993-2005	Pathology 230C Lecturer: Endometrium, Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California
1993-2005	Pathology 230C Laboratory Instructor & Small Group Session Leader: Gynecologic & Breast Pathology, Stanford University School of Medicine, Stanford, California
1993-2005	Pathology 230C Laboratory Instructor and Small Group Session Leader: Endocrine and Bone Pathology, Stanford University School of Medicine, Stanford, California
1994	Lecturer, Anatomic Pathology Residency Training Program: GI Pathology I-VI, Department of Pathology, Stanford University, Stanford, California
1994-2005	Pathology 230C Lecturer: Breast Pathology I & II, Stanford University School of Medicine, Stanford, California
1995-2005	Lecturer, Anatomic Pathology Residency Training Program: Gyn Pathology, Department of Pathology, Stanford University, Stanford, California
1996	Adult GI Clinical-Pathologic Correlation Conference, Laboratory of Surgical Pathology, Stanford University Hospital and Medical Center, Stanford, California
2000-2005	Endocrine Pathology Laboratory Coordinator, Stanford University School of Medicine, Stanford, California
2003	Pediatric GI Clinical-Pathologic Correlation Conference, Laboratory of Surgical Pathology, Stanford University Hospital and Medical Center, Stanford, California
2004	Anatomic Pathology Didactic Lecture Series Organizer, Department of Pathology, Stanford University, Stanford, California
2005-2006	Human Health & Disease 223 Lecturer: Endometrium, Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California
2005-2006	Human Health & Disease 223 Lecturer: Breast I & II, Stanford University School of Medicine, Stanford, California
2005-2006	Human Health & Disease 223 Small Group Session Leader: Gynecologic Pathology, Stanford University School of Medicine, Stanford, California

2005-2006 Human Health & Disease 223 Small Group Session Leader: Breast Pathology, Stanford University School of Medicine, Stanford, California

2005 Lecturer, Anatomic Pathology Residency Training Program: Ovarian Neoplasia I-VI, Department of Pathology, Stanford University, Stanford, California

2008 Digestive Disease Conference, Stanford University School of Medicine, Stanford, California

2008 Human Health & Disease 223 Lecturer: GI Pathology I-II, Stanford University School of Medicine, Stanford, California

2008 Annual QA/QI Lecture: Quality in the Laboratory and Regulatory Agencies, Department of Pathology, Stanford University, Stanford, California

2008 Human Health & Disease 223 Lecturer: Endometrium, Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California

2008 Human Health & Disease 223 Small Group Session Leader: Gynecologic Pathology, Stanford University School of Medicine, Stanford, California

2009 Digestive Disease Conference, Stanford University School of Medicine, Stanford, California

2009 Human Health & Disease 223 Lecturer: GI Pathology I-II, Stanford University School of Medicine, Stanford, California

2009 Human Health & Disease 223 Lecturer: Endometrium, Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California

2010 Human Health & Disease 223 Lecturer: Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California

2011 Pediatric GI Pathology, Division of Pediatric Gastroenterology, Lucile Packard Children's Hospital, Palo Alto, California

2011 Human Health & Disease 223 Lecturer: Endometrium, Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California

2012 Human Health & Disease 223 Lecturer: GI Pathology I, Stanford University School of Medicine, Stanford, California

2012 Human Health & Disease 223 Lecturer: Endometrium, Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California

2012 Gastroenterology Fellows: Colorectal Pathology, Stanford University School of Medicine, Stanford, California

2013 Pediatric GI Pathology, Division of Pediatric Gastroenterology, Lucile Packard Children's Hospital, Palo Alto, California

2013 Gastroenterology Fellows: Colorectal Pathology, Stanford University School of Medicine, Stanford, California

2013 Human Health & Disease 223 Lecturer: GI Pathology I, Stanford University School of Medicine, Stanford, California

2013 Human Health & Disease 223 Small Group Session Leader: Liver

2013	Pathology, Stanford University School of Medicine, Stanford, California Human Health & Disease 223 Lecturer: Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California
2013	Human Health & Disease 223 Small Group Session Leader: Gynecologic Pathology, Stanford University School of Medicine, Stanford, California
2014	Gastroenterology Fellows: Pathology of the Upper Gastrointestinal Tract, Stanford University School of Medicine, Stanford, California
2014	Human Health & Disease 223 Lecturer: GI Pathology I, Stanford University School of Medicine, Stanford, California
2014	Human Health & Disease 223 Small Group Session Leader: Gastrointestinal Pathology, Stanford University School of Medicine, Stanford, California
2014	Human Health & Disease 223 Small Group Session Leader: Liver Pathology, Stanford University School of Medicine, Stanford, California
2014	Human Health & Disease 223 Co-Lecturer: Endometrium, Stanford University School of Medicine, Stanford, California
2014	Human Health & Disease 223 Lecturer: Myometrium & Fallopian Tube, Ovary I & II, Stanford University School of Medicine, Stanford, California
2014	Human Health & Disease 223 Small Group Session Leader: Gynecologic Pathology, Stanford University School of Medicine, Stanford, California

POST-DOCTORAL FELLOWS (GYNECOLOGIC & BREAST PATHOLOGY)

2007-2008	Ghada Esheba, MSc., M.D., Tanta Hospital, Tanta, Egypt
2008-2009	Amy Ly, M.D., Massachusetts General Hospital, Boston, Massachusetts
2009-2010	William Rogers, M.D., El Camino Hospital, Mountain View, California
2010-2011	Jonathan Kitayama, M.D., Kapiolani Medical Center for Women and Children, Honolulu, Hawaii
2011-2012	Saul Offman, M.D., Dalhousie University, Halifax, Nova Scotia, Canada
2012-2013	Lorraine Pan, M.D., Stanford University, Stanford, California
2013-2014	Michael Clay, M.D., Emory University, Atlanta, Georgia
2013-2014	Christopher Conklin, M.D., Stanford University, Stanford, California
2014-2015	Mary O'Keefe, M.D., Stanford University, Stanford, California

POST-DOCTORAL FELLOWS (GASTROINTESTINAL PATHOLOGY)

2013-2014	Michael DiMaio, M.D., Stanford University, Stanford, California
2014-2015	Chrisy Mafnas, M.D., Stanford University, Stanford, California

MEDICAL STUDENT RESEARCH SCHOLARS

2012-2013	Allison Zemek, Stanford University School of Medicine, Stanford, California
-----------	---

UNDERGRADUATE & HIGH SCHOOL RESEARCH ASSISTANTS

2010-2011	Sofia Liu, University of Pennsylvania, Philadelphia, Pennsylvania
2011-2012	Adita Mukund, Bellarmine College Preparatory, San Jose, California
2012-2013	Gerry Sann Rivera, Stanford University, Stanford, California
2013-2014	Jessica Li, Columbia University, New York, NY
2014-2015	Jessika Baral, Mission San Jose High School, Fremont, California

VISITING SCHOLARS

2005	Takako Kiyokawa, M.D., Jikei University School of Medicine, Tokyo, Japan
2006	Thuan Cong Dang, M.D., Hue University Hospital, Hue Medical Center, Hue, Vietnam
2007	Geung Hwan Ahn, M.D., Ph.D., Sungkyunkwan University, Seoul, Korea
2007	Sharon S. Zhang, M.D., Ph.D., University of California San Diego, San Diego, California
2009	Joon Yim, M.D., Acupath Laboratories, New York, New York
2011	Esin Atik Dogan, MD, Antakya, Hatay, Turkey
2012	Vinicius Cabral, MD, Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil
2014	Justyna Szafranska, MD, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

PLATFORM/PLENARY SESSION PRESENTATIONS

Longacre T, Crago S, Foucar K: Clinical, Cytochemical, Flow Cytometric Immunophenotyping And DNA Content Analysis Of Hematogones. Platform Presentation, International Academy of Pathology, Washington, D.C., March, 1988.

Longacre T, Dressler L, Willman C: Differential Expression Of Myeloid Lineage Tyrosine-Kinase Genes In Acute Myeloid Leukemia (AML). Platform Presentation, International Academy of Pathology, Washington, D.C., March, 1988.

Willman C, **Longacre T**, Stewart C: Identification Of A New Biological Subtype Of Acute Leukemia With A Dual NK Cell - Myeloid Phenotype. Platform Presentation, International Academy of Pathology, Washington, D.C., March, 1988.

Longacre TA, Fenoglio-Preiser CM: Histologic Definition Of Mixed Hyperplastic-Adenomatous Polyps: A Distinct Form Of Colorectal Neoplasia. Platform Presentation, United States and Canadian Academy of Pathology, March, 1989.

Baker RJ, Hildebrandt RH, Rouse RV, Hendrickson, MR, **Longacre TA**: Uterine Tumors With Sex Cord Stromal Differentiation: Evidence For True Sex Cord Differentiation. Platform Presentation at the United States and Canadian Academy of Pathology Meeting, Washington D.C., March, 1998.

Shibata A, **Longacre T**, Puligandla B, Parsonnet J, Habel L: Histologic Classification Of Gastric Adenocarcinoma For Epidemiologic Research: Concordance Between Pathologists, International Epidemiological Association, Florence, Italy, September, 1999.

Kambham N, Vij R, Cartwright C, **Longacre TA**. CMV Infection: A Significant Cause of Steroid-Refractory Ulcerative Colitis. Platform Presentation at the United States and Canadian Academy of Pathology Meeting, Washington D.C., March, 2003.

Gilks B, Vanderhyden B, Zhu S, van de Rijn M, **Longacre T**. Distinction Between Serous Borderline Tumors and Serous Carcinomas Based on mRNA Expression Profiling. Platform Presentation at the United States and Canadian Academy of Pathology Meeting, Washington, D.C., March, 2003.

Longacre T, Tazelaar H, Kempson R, Hendrickson M. Serous Tumors of Low Malignant Potential: Stanford Update. Platform Presentation at the United States and Canadian Academy of Pathology Meeting, Washington D.C., March, 2003.

McKenney JM, Balzer BL, **Longacre TA**. Ovarian Serous Tumors of Low Malignant Potential with Stromal Microinvasion: A Clinicopathologic Study of 36 Cases, Platform Presentation at the United States and Canadian Academy of Pathology Meeting, Vancouver, B.C., March, 2004.

McKinney JM, Balzer BL, **Longacre TA**. Histologic Patterns Of Lymph Node Involvement In Women With Primary Ovarian Serous Tumors Of Low Malignant Potential (S-LMP), Platform Presentation, United States and Canadian Academy of Pathology Meeting, San Antonio, Texas, February, 2005.

McKinney JM, Gilks CB, **Longacre TA**. The Classification Of Extra-Ovarian Implants Associated With Ovarian Serous Tumors Of Low Malignant Potential (S-LMP): clinicopathologic study of 181 cases, Platform Presentation, United States and Canadian Academy of Pathology Meeting, San Antonio, Texas, February, 2005.

Liou WS, Hamilton CA, Cheung MK, Osann K, **Longacre TA**, Teng NN, Husain A, Dirbas F, Chan JK. Outcomes of women with double primary breast and ovarian carcinomas – an analysis of the SEER database. 35th Annual Meeting Society of Gynecologic Oncologists, Miami, Florida March 2005.

Hamilton CA, Cheung MK, Osann K, Husain A, Teng NN, Kapp DS, Chen LM, **Longacre TA**, Chan JK. Uterine papillary serous and clear cell histologies predict poorer survival compared to grade 3 endometrioid corpus cancer. 34th Annual Meeting of the Western Association of Gynecologic Oncologists, Santa Fe, New Mexico, June 2005.

West RB, Gilks CB, van de Rijn M, **Longacre TA**. Stromal signatures in ovarian serous tumors of low malignant potential and serous carcinoma. Platform Presentation, United States and Canadian Academy of Pathology Meeting, Atlanta, Georgia, February, 2006.

Silva E, Vang R, Kurman R, Prat J, **Longacre T**. Invasive implants of serous borderline ovarian neoplasms – a multiinstitutional study. Platform Presentation, United States and Canadian Academy of Pathology Meeting, Atlanta, Georgia, February, 2006.

Hazard K, **Longacre TA**. Ovarian surface epithelial neoplasms in the pediatric population. Platform Presentation, Pediatric Pathology Society Meeting, San Diego, California, March, 2007.

Cuff J, **Longacre TA**. Ovarian endometrioid and clear cell carcinoma arise via different precursor lesions and have better prognosis when associated with endometriosis. Platform Presentation, United States and Canadian Academy of Pathology Meeting, Denver, Colorado, March, 2009.

Mills AM, Ly A, Balzer BL, Hendrickson MR, Kempson RL, McKenney JK, **Longacre TA** Cell cycle regulatory markers in uterine atypical leiomyoma, cellular leiomyoma, STUMP and leiomyosarcoma: immunohistochemical study of 74 cases with clinical follow-up. United States and Canadian Academy of Pathology Meeting, Washington D.C., March, 2010.

Fujiwara M, Felberg A, Whittemore AS, McGuire VM, **Longacre TA** Germline BRCA1 mutation positive ovarian cancer exhibits a distinctive highly specific phenotype. Platform Presentation, United States and Canadian Academy of Pathology Meeting, San Antonio, Texas, *Winner of the International Society of Gynecological Pathologists Best Platform Presentation*, March, 2011.

Moore FN, Pam, L, **Longacre TA**. Endometriosis-associated carcinomas exhibit significant site-specific differences: analysis of 396 cases. United States and Canadian Academy of Pathology Meeting, Vancouver, B.C., Canada, March, 2012.

Martin B, Hazard K, **Longacre TA** Platform Presentation, Evaluation of intestinal biopsies for pediatric enteropathy: A proposed immunohistochemical panel approach Pediatric Pathology Society Meeting, San Diego, California, March, 2013.

EXTRAMURAL PRESENTATIONS AND CONFERENCES

Workshop: Immunologic Approaches to the Diagnosis of Neoplasms. American Society of Clinical Pathology Spring Meeting, Seattle, Washington, April 1994.

The Florida Society of Pathologists' 21st Annual Anatomic Pathology Conference: Surface Epithelial Neoplasms of the Ovary and Their Differential Diagnosis, Lake Buena Vista, Florida, January 1995.

SmithKline Diagnostics: Colorectal Dysplasia and Carcinoma. San Jose, California, February 1995.

Updates in Pathology: Well Differentiated Endometrial Carcinoma: A Proposed Diagnostic Test for Myoinvasion, University of California San Francisco, San Francisco, California, March 1995.

Workshop: Immunologic Approaches to the Diagnosis of Neoplasms. The American Society of Clinical Pathology Spring Meeting, Orlando, Florida, April 1995.

Current Concepts in Pathology: Atypical Polypoid Adenomyomas, Stanford, California, September 1995.

Workshop: Immunologic Approaches to the Diagnosis of Neoplasms. The American Society of Clinical Pathology Spring Meeting, Washington D.C., June 1996.

Co-chair and Panel Member, National Cancer Institute Breast and Ovarian Cancer Family Registry, NCI Pathology Working Group Committee Workshop, Stanford, California, September 1996.

Current Concepts in Pathology: Diagnostic Pitfalls in Gynecologic Pathology, Stanford, California, September 1996.

Moderator, Gastrointestinal Pathology Plenary Session, United States and Canadian Academy of Pathology, March 1997.

Workshop: Immunologic Approaches to the Diagnosis of Neoplasms. The American Society of Clinical Pathology Spring Meeting, Washington, D.C., September 1998.

Current Issues in Anatomic Pathology: Diagnostic Problems in Small Bowel Biopsies, San Francisco, California, May 1999.

Workshop: Immunologic Approaches to the Diagnosis of Neoplasms. The American Society of Clinical Pathology Spring Meeting, New Orleans, Louisiana, September 1999.

Workshop: Immunologic Approaches to the Diagnosis of Neoplasms. The American Society of Clinical Pathology Spring Meeting, Las Vegas, Nevada, February 2000.

Current Issues in Anatomic Pathology: Dysplasia in Inflammatory Bowel Disease: Diagnosis and Clinical Consequences, UCSF-Stanford Course, San Francisco, California, May 2000.

Current Issues in Anatomic Pathology: Atypical Polypoid Adenomyoma/Well-Differentiated Adenocarcinoma, San Francisco, California, May 2002.

National Cancer Institute Breast and Ovarian Cancer Family Registry Steering Committee: Pathology Subcommittee, Hawaii, February 2003.

Current Issues in Anatomic Pathology: Problems in the Diagnosis of Appendiceal Epithelial Tumors and Pseudomyxoma, San Francisco, California, May 2003.

National Cancer Institute: Borderline Ovarian Tumor Consensus Workshop, Bethesda, Maryland, August 2003.

Moderator, Gynecologic Pathology Plenary Session, United States and Canadian Academy of Pathology, Vancouver, British Columbia, Canada, March 2004.

Gynecologic Pathology Evening Specialty Conference: Strategies for Predicting Site of Origin of Problematic Glandular Proliferations in Uterine Curettings, United States and Canadian Academy of Pathology, San Antonio, Texas, March 2005.

Current Issues in Anatomic Pathology: Problems in Extra-Ovarian Serous Neoplasia, San Francisco, California, May 2005.

GI Clinical Conference: Colitis: The Pathologist's Perspective, Division of Gastroenterology, Department of Internal Medicine, Stanford University School of Medicine, Stanford, California, September 2005.

Slide Seminar: Problems in Gynecological Pathology, Department of Pathology, University of New Mexico, Albuquerque, New Mexico, October 2005.

Sixth Annual International Conference on Ovarian Cancer: Serous Tumors of Low Malignant Potential: An Update, Memorial Sloan-Kettering Cancer Center, New York, NY, November 2005.

Grand Rounds: Serous Borderline Tumors: Classification, Clinical Management and Continuing Controversies, University of Pittsburgh, Pittsburgh, Pennsylvania, November 2005.

International Society of Gynecological Pathologists: Surface Epithelial Tumors of the Ovary. Part I. Borderline Tumors – Current State of the Art: Significance of Microinvasion and Lymph Node Involvement, United States and Canadian Academy of Pathology, Atlanta, Georgia, February 2006.

Grand Rounds: Ovarian Serous Tumors of Low Malignant Potential: A Risk Model for Disease Progression, University of California, Los Angeles, Los Angeles, California, March 2006.

Current Issues in Anatomic Pathology: Problematic Glandular Proliferations in Uterine Curettings: Strategies for Predicting Site of Origin, San Francisco, California, June 2006.

Visiting Professor and Lecturer: Hereditary Diffuse Gastric Cancer Syndrome, University of Manitoba, Winnipeg, Manitoba, Canada, June 2006.

Visiting Professor and Grand Rounds Lecturer: Hereditary Diffuse Gastric Cancer Syndrome: The Gene That Binds Families Together, Memorial-Sloan Kettering Cancer Center, New York, NY, October 2006.

Thirteenth Annual Practical Pathology at Whistler: Diagnostic Problems in Uterine Curettings, Chateau Whistler, Whistler, British Columbia, Canada, February 2007.

Thirteenth Annual Practical Pathology at Whistler: Mucinous Tumors in the Ovary: Primary or

Metastatic? Chateau Whistler, Whistler, British Columbia, Canada, February 2007.

Short Course, Mesenchymal Neoplasms of the Female Genital Tract, United States and Canadian Academy of Pathology, San Diego, California, March 2007

Current Issues in Anatomic Pathology, Update on GI Neuroendocrine Tumors, San Francisco, California, May 2007.

5th Asia Pacific International Academy of Pathology Congress Meeting, Serous Borderline Tumors, Singapore, May 2007.

5th Asia Pacific International Academy of Pathology Congress Meeting: Mucinous Borderline Tumors, Singapore, May 2007.

Panel Member, Interesting Case Presentations, 5th Asia Pacific International Academy of Pathology Congress Meeting, Singapore, May 2007.

Women's Cancers: Surgical Pathology, Cytology and Immunohistochemistry of Breast and Genital Tumors: Endometrial Stromal and Related Tumors, Hilton Head Island, South Carolina, June 2007.

Women's Cancers: Surgical Pathology, Cytology and Immunohistochemistry of Breast and Genital Tumors: Endometrioid and Clear Cell Tumors of the Ovary: Differential Diagnosis, Hilton Head Island, South Carolina, June 2007.

Women's Cancers: Surgical Pathology, Cytology and Immunohistochemistry of Breast and Genital Tumors: The Nonneoplastic Endometrium, Hilton Head Island, South Carolina, June 2007.

Women's Cancers: Surgical Pathology, Cytology and Immunohistochemistry of Breast and Genital Tumors: Adenocarcinoma of the Cervix: Problems and Differential Diagnosis, Hilton Head Island, South Carolina, June 2007.

Women's Cancers: Surgical Pathology, Cytology and Immunohistochemistry of Breast and Genital Tumors: Mucinous Tumors of the Ovary: From Adenoma to Carcinoma and How to Rule Out Metastasis, Hilton Head Island, South Carolina, June 2007.

Diagnostic Pathology Update: Updates In Gyn Pathology, United States and Canadian Academy of Pathology, Banff, Alberta, Canada, July 2007.

Mortimer & Harold Cohen Lecturer, Serous Epithelial Neoplasms of the Ovary: Recent Developments and Diagnostic Problems, Magee-Women's Hospital, University of Pittsburgh, Pittsburgh, Pennsylvania, October 2007.

Invited Lecturer, Kaiser Permanente Hospital, Walnut Creek, Evaluation of the Gynecologic Frozen Section: Common Pitfalls and How to Avoid Them, November 2007.

Guest Speaker, Indian Continuing Medical Education, Endocervical Adenocarcinoma: Diagnostic Problems and Special Variants, Chandigarh, India, November 2007

Guest Speaker, National Indian Academy of Pathology and Microbiology, Update on Gastrointestinal Stromal Tumors: Getting the *Gist* of GIST, Chandigarh, India, November 2007.

Guest Speaker and Panel Member, California Society of Pathologists Annual Seminar, San Francisco, California, December 2007.

Visiting Professor and Guest Lecturer, Tanta University, Tanta, Egypt, February 2008.

Guest Lecture, Kaiser Permanente Hospital, Walnut Creek, Appendiceal Neoplasms: Pseudomyxoma and Other Diagnostic Problems, March 2008.

Guest Lecture, Kaiser Permanente Hospital, Walnut Creek, Sex Cord Stromal Neoplasms of the Ovary, March 2008.

Faculty, Short Course, Mesenchymal Neoplasms of the Female Genital Tract, United States and Canadian Academy of Pathology, Denver, Colorado, March 2008.

Invited Speaker, International Society of Gynecological Pathologists: Atypical Endometrial Hyperplasia and Endometrial Intraepithelial Neoplasia: A Step Towards Constructive Dialogue, United States and Canadian Academy of Pathology, Denver, Colorado, March 2008.

Invited Speaker, Rodger C. Haggitt Gastrointestinal Pathology Society: Challenging Cases in Anal Pathology, United States and Canadian Academy of Pathology, Denver, Colorado, March 2008.

Moderator, Gynecologic Pathology Plenary Session, United States and Canadian Academy of Pathology, Denver, Colorado, March 2008.

Invited Speaker, Gynecologic Pathology Evening Specialty Conference: Strategies for Evaluating Problematic Mesenchymal Tumors in Uterine Curettings, United States and Canadian Academy of Pathology, Denver, Colorado, March 2008.

Guest Lecturer, Surgical Pathology of Neoplastic Diseases, Memorial Sloan-Kettering Cancer Center, New York, NY, May 2008.

Faculty, Diagnostic Pathology Update: Updates In Gyn Pathology, United States and Canadian Academy of Pathology, Maui, Hawaii, July 2008.

Invited Lecturer, Ovarian Clear Cell and Serous Carcinoma: Recent Developments, Updates In Cancer Diagnosis, Samsung Hospital, Seoul, Korea, September 2008.

Guest Speaker, XXVII International Congress of the International Academy of Pathology,

Uterine Mesenchymal Tumors, Athens, Greece, October 2008.

Guest Lecturer, Serous Borderline Tumors and Atypical Polypoid Adenomyoma, Gynecologic Pathology Post-Graduate Course, Kyoto, Japan, November 2008

Invited Speaker, Top Ten Diagnoses Not To Be Missed In Ovarian Pathology, Video Tutorial, California Society of Pathologists Annual Seminar, Los Angeles, California, December 2008.

Invited Speaker, Problems in Ovarian Tumor Pathology, Walnut Creek Kaiser Permanente, Walnut Creek, California, December 2008.

Slide Seminar, Selected Problems in Pelvic Serous Carcinoma, Department of Pathology, University of Washington, Seattle, Washington, February 2009

Moderator, Gynecologic Pathology Plenary Session, United States and Canadian Academy of Pathology, Boston, Massachusetts, March 2009.

Current Issues in Anatomic Pathology, Clinical Significance of MSI, KRAS and EGFR Assays In Gastrointestinal Tumors. San Francisco, California, May 2009.

Invited Lecturer, Women's Cancers: Surgical Pathology, Cytology and Immunohistochemistry of Breast and Genital Tumors, Mauna Kea Resort, Big Island of Hawaii, June 2009.

Faculty, Diagnostic Pathology Update: Updates In Gynecological and Placental Pathology, United States and Canadian Academy of Pathology, Niagara Falls, New York, July 2009.

Invited Speaker, 7th Asia Pacific International Academy of Pathology Congress Meeting, Kerala, India, August 2009.

Invited Speaker, Mismatch Repair Protein Deficiency in Colorectal Carcinoma, California Pacific Medical Center, Department of Pathology, San Francisco, CA, December 2009

Invited Speaker, Ovarian Pathology, California Society of Pathologists Annual Seminar, San Francisco, California, December 2009.

Invited Lecturer, Ohio State University Pathology Update, Columbus Ohio, August 2010

Update on Pathology of Neuroendocrine Tumors, Neuroendocrine Tumor Patient Education Conference, Caring for Carcinoid Foundation & Stanford Cancer Center, Stanford, California, September 2010

Invited Speaker, International Gynecologic Cancer Society, Prague, Hereditary "Ovarian" Cancer: Update & Role of the Fallopian Tube, October 2010

Invited Speaker, International Academy of Pathology, Surgical Pathology: Update In Ovarian Pathology: The Concept of Pelvic Serous Carcinoma, Sao Paulo, Brazil, October 2010

Invited Speaker and Panelist, International Academy of Pathology, Surgical Pathology Case Presentation, Sao Paolo, Brazil, October 2010

Invited Speaker and Panelist, Arias Stella Society, Sao Paolo, Brazil, October 2010

Invited Speaker, Avances Recientes en Patología Quirúrgica y su Impacto Terapéutico, Hospital de Oncologia, Centro Medico Nacional, Siglo XXI, Mexico City, Mexico, January 2011

Invited Speaker, International Society of Gynecological Pathologists: Clear Cell Carcinoma: Not Everything Is Always as Clear As It Seems. United States and Canadian Academy of Pathology, San Antonio, Texas, February 2011

Invited Speaker, Pacific Northwest Society of Pathology, Vancouver, BC, May 2011

Invited Speaker, The British Association of Gynaecological Pathologists, London, England, June 2011

Visiting Professor, University of Hawaii, Honolulu, Hawaii, August 2011

Guest Speaker, Hawaii Society of Pathology, Honolulu, Hawaii, August 2011

USCAP Ambassador, 6th Surgical Pathology Conference of the West African Division of the International Academy of Pathology, Abuja, Nigeria, August 2011

Faculty, Gynecologic Pathology: Gross Examination of Uterine, Fallopian Tube and Ovarian Specimens, American Association of Pathologists' Assistants' 37th Annual Continuing Education and Business Conference, San Francisco, California, August 2011

Neuroendocrine Tumor Patient Education Conference, Caring for Carcinoid Foundation & Stanford Cancer Center, Stanford, California, September 2011

Invited Speaker, Oregon Pathologists Association, Portland, Oregon, September 2011

Faculty, Short Course, Hereditary Gynecologic Cancer Syndromes, American Society for Clinical Pathology, Las Vegas, Nevada, October 2011.

Invited Speaker, Update in GI Pathology, Department of Pathology, Tata Memorial Hospital, Mumbai, India, November 2011

Invited Speaker and Panel Member, Diagnostic Problems in Surgical Pathology, California Society of Pathologists Annual Seminar, San Francisco, California, December 2011.

Molecular Advances In Gynecologic Pathology: Screening for Hereditary Cancer Syndromes, Memorial Sloan-Kettering Grand Rounds, New York, NY, March 2012

Biobanking for Clinical Care in the Molecular Era, ADASP, United States and Canadian Academy of Pathology, Vancouver, British of Columbia, March 2012.

Moderator, Gynecologic and Oncology Plenary Session, March 2012, United States and Canadian Academy of Pathology, Vancouver, British of Columbia, March 2012

Faculty, Short Course, Glandular Lesions of the Cervix: An Integrated Cytologic and Histologic Approach, United States and Canadian Academy of Pathology, Vancouver, British of Columbia, March 2012.

Invited Speaker and Panel Member, Surgical Pathology Specialty Conference, United States and Canadian Academy of Pathology, Vancouver, British of Columbia, March 2012.

Molecular Advances In Gynecologic Pathology: Screening for Hereditary Cancer Syndromes, Yale Pathology Grand Rounds, New Haven, Connecticut, April 2012

Invited Lecturer, Borderline Tumors of the Ovary, New York Pathology Society, New York, NY, May 2012

Invited Speaker, Mexico Society of Pathology Annual Meeting, Gynecologic Pathology Long Course, Queretaro, Mexico, May 2012

Invited Speaker, Problems in Anal Pathology, Stars in the Mountains, The Colorado Society of Clinical Pathologists, Vail, Colorado, July 2012

Invited Speaker, Hereditary Cancer Syndromes, Stars in the Mountains, The Colorado Society of Clinical Pathologists, Vail, Colorado, July 2012

Council Meeting, International Society of Gynecological Pathologists, WHO Classification of Gynecologic Tumors, New York, New York, August, 2012

Faculty, 2012 International Academy of Pathology Congress, Cape Town, South Africa, October 2012

Invited Speaker and Panel Member, Gynecologic Pathology Slide Seminar, Cape Town, South Africa, October 2012

Invited Speaker, GI Polyps, California Society of Pathologists Annual Seminar, San Francisco, California, December 2012

Invited Speaker, Polyps and Polyposis Syndromes, Kaiser Northern California, Webinar, Stanford, California, January 2013

Invited Speaker, Molecular Medicine TriConference, San Francisco, California, February 2013

Course Instructor, Morphologic Phenotype(s) of BRCA1/2 Breast and Ovarian Cancer:

Implications for Screening, American Society of Clinical Pathology, Rancho Mirage, California, February 2013

Faculty, Short Course, Glandular Lesions of the Cervix: An Integrated Cytologic and Histologic Approach, United States and Canadian Academy of Pathology, Baltimore, Maryland, March 2013

Invited Speaker, Current Issues in Surgical Pathology, University of Texas Southwestern, Dallas, Texas, April 2013

Invited Speaker, British Association of Gynecological Pathologists, 10th Annual Meeting, London, United Kingdom, June 2013

Consensus Group, Tumors of the Female Genital Tract, World Health Organization, Lyon, France, June 2013

Lecturer, Endometrial Carcinoma: Diagnosis and Histologic Subtypes, Kaiser Southern California Webinar, August 2013

Lecturer, Inflammatory Bowel Disease and the Diagnosis of Dysplasia, Kaiser Northern California Webinar, August 2013

Lecturer, Endometrial Carcinoma: Diagnosis and Histologic Subtypes, Kaiser Northern California Webinar, September 2013

Visiting Professor, University of Hawaii, Honolulu, Hawaii, August 2013

Invited Speaker, Hawaii Society of Pathology, Honolulu, Hawaii, August 2013

Short Course, American Society for Clinical Pathology, Chicago, Illinois, September 2013

Invited Lecturer, Ohio State University Pathology Update, Columbus Ohio, October 2013

Short Course, College of American Pathologists, Orlando, Florida, October 2013

Invited Lecturer, Brazilian Society of Pathology, 29th Congress, Florianopolis, Brazil, November 2013

Lecturer, Ovarian Serous Borderline Tumors & Low Grade Serous Carcinoma, Kaiser Northern California Webinar, November 2013

Lecturer, Pancreatic Cystic Lesions, Kaiser Northern California Webinar, December 2013

Short Course, Surgical Pathology of the Female Genital Tract During Pregnancy, California Society of Pathologists Annual Seminar, San Francisco, California, December 2013

Lecturer, Ovarian Serous Borderline Tumors & Low Grade Serous Carcinoma, Kaiser Southern California Webinar, January 2014.

Invited Speaker, Molecular Medicine TriConference, Moscone Convention Center, San Francisco, California, February 2014

Invited Lecturer, Annual Gynecologic Pathology/Oncology Conference, Detroit, Michigan, February 2014

Faculty, Short Course, Glandular Lesions of the Cervix: An Integrated Cytologic and Histologic Approach, United States and Canadian Academy of Pathology, San Diego, California, March 2014

Faculty, Short Course, Hereditary Gynecologic Cancer Syndromes, United States and Canadian Academy of Pathology, San Diego, California, March 2014

Panelist, Hot Topics in Gynecological Pathology, United States and Canadian Academy of Pathology, San Diego, California, March 2014

Invited Lecturer, USCAP Practical Pathology Seminar, 2014, New York, New York, May 2014

Presidential Guest Lecture, Western Association of Gynecologic Oncologists, Tahoe, California, June 2014

Invited Lecturer, Florida Society of Pathologists, Palm Beach, Florida, July 2014

Faculty, Short Course, College of American Pathologists, Chicago, Illinois, September 2014

Visiting Professor, Birmingham, England, September 2014

Co-Chair and Invited Lecturer, Updates on Vulvar and Anal Pathology, International Academy of Pathology, Bangkok, Thailand, October 2014

Short Course, Endocervical Adenocarcinoma: An Integrative Cytologic and Histologic Approach, California Society of Pathologists Annual Seminar, San Francisco, California, December 2014

Grand Rounds, New York University, New York City, New York, December 2014

Faculty, Short Course, Hereditary Gynecologic Cancer Syndromes, United States and Canadian Academy of Pathology, Boston, Massachusetts, March 2015

Invited Speaker, International Society of Gynecological Pathologists: Vulvar and Anal Intraepithelial neoplasia. Diagnosis, Nomenclature and Ancillary Studies, United States and Canadian Academy of Pathology, Boston, Massachusetts, March 2015

Invited Speaker, Gynecological Pathology Evening Panel, United States and Canadian Academy of Pathology, Boston, Massachusetts, March 2015

Invited Speaker, Association of Directors of Anatomic and Surgical Pathology, Boston, Massachusetts, March 2015

Guest Lecturer, Houston Society of Clinical Pathology Spring Seminar, Houston, Texas, April 2015

Visiting Professor, Department of Pathology, Baylor College of Medicine, Houston, Texas, April, 2015

Invited Lecturer, Scientific Symposiums International, Celebrating the Illustrious Career of Dr. Richard L. Kempson: Surgical Pathology of the Breast, Female Genital Tract, Head & Neck and Lung, Big Island of Hawaii, July 2015

Invited Lecturer, American Society of Clinical Pathology, Pathology Update, Las Vegas, Nevada, July 2015

Faculty, Short Course, College of American Pathologists, Nashville, Tennessee, October 2015

Short Course, American Society of Clinical Pathology, Long Beach, California, October 2015

PEER-REVIEWED JOURNAL ARTICLES

1. **Longacre TA**, Bartow SA: A correlative morphologic study of breast and endometrium in the menstrual cycle. *Am J Surg Pathol* 1986; 10: 382-393.
2. **Longacre TA**, Foucar K, Crago S, Chen I-M, Griffith B, Dressler L, McConnell TS, Duncan M, Gribb J: Hematogones: A multiparameter analysis of bone marrow precursor cells. *Blood* 1989; 73:543-552.
3. **Longacre T**, Foucar K, Koster F, Burgdorf W: Atypical cutaneous lymphoproliferative disorder resembling mycosis fungoides in AIDS: Report of a case with concurrent Kaposi's sarcoma. *A J Dermatopathol* 1989; 11:451-456.
4. **Longacre TA**, Listrom MB, Spigel JH, Willman CL, Dressler L, Clark D: Aggressive jejunal lymphoma of large granular lymphocytes: Immunohistochemical, ultrastructural, molecular and DNA content analysis. *Am J Clin Pathol* 1990; 93:124-132.
5. **Longacre TA**, Fenoglio-Preiser CM: Mixed hyperplastic adenomatous polyps/serrated adenomas: A distinct form of colorectal neoplasia. *Am J Surg Pathol* 1990; 14:524-537.
6. Willman CL, Stewart CC, **Longacre TA**, Head DR, Habbersett R, Ziegler SF, Perlmutter

RM: Expression of the c-fgr and hck protein-tyrosine kinases in acute myeloid leukemic blasts is associated with early commitment and differentiation events in the monocytic and granulocytic lineages. *Blood* 1991; 77:726-734.

7. Smoller BR, **Longacre TA**, Warnke RA: Ki-1 (CD30) expression in differentiation of lymphomatoid papulosis from arthropod bite reactions. *Modern Pathology* 1992; 5:492-496.

8. **Longacre TA**, Smoller BR: Leukemia cutis. Analysis of 50 biopsy-proven cases with emphasis on occurrence in myelodysplastic syndromes. *Am J Clin Pathol* 1993; 100:276-284.

9. **Longacre TA**, Smoller BR, Rouse RV: Atypical fibroxanthoma: Multiple immunohistologic profiles. *Am J Surg Pathol* 1993; 17:1199-1209.

10. Davis RE, **Longacre TA**, Cornbleet PJ: Hematogones in the bone marrow of adults: Immunophenotypic features, clinical settings and differential diagnosis. *Am J Clin Pathol*, 1994; 102:202-211.

11. **Longacre TA**, Chung MH, Jensen DN, Hendrickson MR: Proposed criteria for the diagnosis of well differentiated endometrial carcinoma: a diagnostic test for myoinvasion. *Am J Surg Pathol*, 1995; 19:371-406.

12. Wallace ML, **Longacre TA**, Smoller BR: Estrogen and progesterone receptors and BRST-2 fail to distinguish metastatic breast carcinoma from eccrine neoplasms. *Modern Pathol*, 1995; 8:897-901.

13. Rouse RV, Soetikno RM, Baker RJ, Barnard IC, Triadafilopoulos G, **Longacre TA**: Esophageal submucosal gland duct adenoma. *Am J Surg Pathol*, 1995; 19:1191-1196.

14. O'Hanlan K, Kargas S, Schreiber M, Hendrickson M, **Longacre T**, Burrs D: Ovarian carcinoma metastases to gastrointestinal tract appear to spread like colon carcinoma to mesenteric lymph nodes: Implications for surgical resection. *Gynecol Oncol*, 1995; 59:200-206.

15. **Longacre TA**, Chung MH, Rouse RV, Hendrickson MR: Atypical polypoid adenomyofibromas (atypical polypoid adenomyomas) of the uterus. A clinicopathologic study of 55 cases. *Am J Surg Pathol*, 1996; 20:1-20.

16. Soslow RA, Chung MH, Rouse RV, Hendrickson MR, **Longacre TA**: Atypical polypoid adenomyofibroma (APA) versus well differentiated endometrial carcinoma with prominent stromal matrix: an immunohistochemical study. *Int J Gynecol Pathol*, 1996; 15:209-216.

17. **Longacre TA**, O'Hanlan K, Hendrickson, MR: Adenoid cystic carcinoma of the submandibular gland with symptomatic ovarian metastases. *Int J Gynecol Pathol*, 1996; 15:349-355.

18. Soslow RA, Rouse RV, Hendrickson MR, Silva EG, **Longacre TA**: Transitional cell neoplasms of the ovary and urinary bladder: a comparative immunohistochemical analysis. *Int J*

Gynecol Pathol, 1996; 15:257-265.

19. **Longacre TA**, Egbert B, Rouse RV: Desmoplastic malignant melanoma: an immunohistochemical study. *Am J Surg Pathol*, 1996; 20:1489-1500.

20. **Longacre TA**, Hendrickson MR, Kapp DS, Teng NH: Lymphangioleiomyomatosis of the uterus simulating high stage endometrial stromal sarcoma. *Gynecol Oncol*, 1996; 63:404-410.

21. Johnson LA, **Longacre TA**, Wharton KA, Jeffrey RB: Multiple mesenteric lymphatic cysts: an unusual feature of mesenteric panniculitis (sclerosing mesenteritis). *J Computer Assisted Tomography*, 1997; 21:103-105.

22. Hildebrandt RH, Rouse RV, **Longacre TA**: Value of inhibin in the identification of granulosa cell tumors of the ovary. *Hum Pathol*, 1997; 28:1387-1395.

23. Ditkoff EC, Tucker T, Levine RU, Lindheim SR, Sauer MV, **Longacre T**. Bilateral serous cystadenofibromas clinically simulating hyperreactio luteinalis following controlled ovarian hyperstimulation and in vitro fertilization. *Journal of Assisted Reproduction and Genetics*, 1997; 14:230-233.

24. Poen JC, Collins HL, Niederhuber JE, Oberhelman HA, Vierra MA, Bastidas AJ, Young HS, Slosberg EA, Jeffrey BR, **Longacre TA**, Fisher GA, Goffinet DR. Chemo-radiotherapy for localized pancreatic cancer: increased dose intensity and reduced acute toxicity with concomitant radiotherapy and protracted venous infusion 5-fluorouracil. *Int J Radiat Oncol Biol Phys*, 1998; 40:93-99.

25. Kresch A, **Longacre T**, Foste JR, Lotze EC, Westland A, Miller G, Savage G. Initial experience with a physiologic morcellating resectoscope. *J Am Assoc Gynecol Laparosc*, 1998; 5:419-421.

26. **Longacre TA**, Hendrickson, MR. Diffusely infiltrative endometrial adenocarcinoma: an adenoma malignum pattern of myoinvasion. *Am J Surg Pathol*, 1999; 23:69-78.

27. Baker RJ, Hildebrandt RH, Rouse RV, Hendrickson, MR, **Longacre TA**. Uterine tumors with sex cord stromal differentiation: Evidence for true sex cord differentiation. *Hum Pathol*, 1999;30(6):671-679.

28. Ramos PC, Kapp DS, **Longacre TA**, Teng NN. Malignant granular cell tumor of the vulva in a seventeen year-old: Case report and literature review. *Int J Gynecol Cancer*, 2000; 10:429-434.

29. Shibata A, **Longacre TA**, Puligandla B, Parsonnet J, Habel LA. Histologic classification of gastric adenocarcinoma for epidemiologic research: concordance between pathologists. *Cancer Epidemiology, Biomarkers and Prevention*, 2001; 10:75-78.

30. Shibata A, Parsonnet J, **Longacre TA**, Garcia MI, Puligandla B, Davis RE, Vogelmann JH, Orentreich N, Habel LA. CagA status of *Helicobacter pylori* infection and p53 gene mutations in

gastric adenocarcinoma. *Carcinogenesis*, 2002; 23:419-424.

31. Schaner ME, Ross DT, Ciaravino G, Sørli T, Troyanskaya O, Diehn M, Wang YC, Duran GE, Sikic TL, Caldeira S, Skomedal H, Tu IP, Hernandez-Boussard T, Johnson SW, O'Dwyer PJ, Fero MJ, Kristensen GB, Børresen-Dale AL, Hastie T, Tibshirani R, van de Rijn M, Teng NN, **Longacre TA**, Botstein D, Brown PO, Sikic BI. Gene expression patterns in ovarian carcinomas. *Mol Biol Cell*, 2003; 14:4376-4386.

32. Kambham N, Vij R, Cartwright CA, **Longacre TA**. Cytomegalovirus infection in steroid-refractory ulcerative colitis: a case-control study. *Am J Surg Pathol*, 2004; 28:365-373.

33. Juretzka MM, Jensen KC, **Longacre TA**, Teng NN, Husain A. Detection of pelvic lymph node micrometastasis in stage IA2-IB2 cervical cancer by immunohistochemical analysis. *Gynecol Oncol*, 2004; 93:107-111.

34. Schwartz E, **Longacre TA**. Adenomatoid tumors of the female and male genital tract express WT1. *Int J Gynecol Pathol*, 2004; 23:123-128.

35. Woo MMM, Gilks CB, Verhage HG, **Longacre TA**, Leung PC, Auersperg N. Oviductal glycoprotein, a new differentiation-based indicator present in early ovarian epithelial neoplasia and cortical inclusion cysts. *Gynecol Oncol*, 2004; 93:315-319.

36. Bell DA, **Longacre TA**, Prat J, Kohn EC, Soslow RA, Ellenson LH, Malpica A, Stoler MH, Kurman RJ. Serous borderline (low malignant potential, atypical proliferative) ovarian tumors: workshop perspectives. *Hum Pathol*, 2004; 35:934-948.

37. **Longacre TA**, McKenney JK, Tazelaar HD, Kempson RL, Hendrickson MR. Ovarian serous tumors of low malignant potential (borderline tumors): Outcome-based study of 276 patients with long term (≥ 5 year) follow-up. *Am J Surg Pathol*, 2005; 29:707-723.

38. Gilks B, Vanderhyden B, Zhu S, van de Rijn M, **Longacre TA**. Distinction between serous tumors of low malignant potential and serous carcinomas based on mRNA expression profiling. *Gyn Oncol*, 2005; 96:684-694.

39. Suriano G, Yew S, Ferreira P, Senz J, Kaurah P, Ford JM, **Longacre TA**, Norton JA, Chun N, Young S, Oliveira MJ, MacGillivray B, Rao A, Sears D, Jackson CE, Boyd J, Yee C, Deters C, Pai GS, Hammond LS, McGivern BJ, Medgyesy D, Sartz D, Arun B, Oelschlager BK, Upton MP, Neufeld-Kaiser W, Silva OE, Donenberg TR, Kooby DA, Sharma S, Jonsson BA, Gronberg H, Gallinger S, Seruca R, Lynch H, Huntsman DG. Characterization of a recurrent germ line mutation of the e-cadherin gene: implications for genetic testing and clinical management. *Clin Cancer Res* 2005; 11:5401-5409.

40. Randolph ML, **Longacre TA**, Gerson L. Acute colitis secondary to self-administered alcohol enemas: a mimic of ischemic colitis. *J Clin Gastroenterol*, 2005;39:78-79.

41. Kambham N, Troxell M, **Longacre TA**. Multinucleated epithelial giant cells in colorectal polyps: A clinicopathologic study of 23 cases. *Am J Surg Pathol*, 2005;29:912-919.
42. McKenney JK, Kong, CS, **Longacre TA**. Endometrial adenocarcinoma associated with subtle lymph-vascular space invasion and lymph node metastasis: a histologic pattern mimicking intravascular and sinusoidal histiocytes. *Int J Gynecol Pathol*, 2005;24:73-38.
43. **Longacre TA**, Bane A, Bleiweiss I, Carter B, Catelano E, Ennis M, Hendrickson MR, Hibshoosh H, Layfield L, Memeo L, Quenneville L, Venter DJ, Wu H, O'Malley FPO. Interobserver agreement and reproducibility in diagnosis and classification of invasive carcinoma of the breast: results of the National Cancer Institute (NCI) Familial Registry Breast Cancer Pathology Working Group. *Mod Pathol*, 2006;19:195-207.
44. Brown LA, Irving J, Parker R, Kim H, Press JZ, **Longacre TA**, Magliocco A, Makretsov N, Gilks B, Pollack J, Huntsman D. Amplification of EMSY, a novel oncogene on 11q13 in high grade ovarian surface epithelial carcinomas. *Gynecol Oncol*, 2006;100:264-270.
45. Kambham N, Kong C, **Longacre TA**, Natkunam Y. Utility of syndecan-1 (CD138) expression in the diagnosis of undifferentiated neoplasms: a tissue microarray study of 1,754 cases. *Appl Immunohistochem Mol Morphol*, 2005;13:304-310.
46. McKenney JK, Balzer BL, **Longacre TA**. Lymph node involvement in ovarian serous tumors of low malignant potential (borderline tumors): pathology, prognosis and proposed classification. *Am J Surg Pathol*, 2006;30:614-624.
47. Krishnan C, **Longacre TA**. Ductal carcinoma in situ of the breast with osteoclast-like giant cells. *Hum Pathol*, 2006;37:369-372.
48. Hamilton CA, Cheung MK, Osann K, Chen LM, Teng NN, **Longacre TA**, Powell MA, Hendrickson MR, Kapp DS, Chan JK. Uterine papillary serous and clear cell carcinomas predict for poorer survival compared to grade 3 endometrioid corpus cancers. *Br J Cancer*, 2006;13:642-646.
49. Liou W-S, Hamilton C, Cheung MK, Osann K, **Longacre TA**, Teng NN, Husain A, Dirbas FM, Chan JK. Outcomes of women with metachronous breast and ovarian carcinomas. *Gynecol Oncol*, 2006; 103:190-194.
50. McKenney JM, Balzer BL, **Longacre TA**. Patterns of stromal invasion in ovarian serous tumors of low malignant potential (borderline tumors): A re-evaluation of the concept of stromal microinvasion. *Am J Surg Pathol*, 2006;30:1209-1221.
51. Bane A, Beck JC, Bleiweiss I, Buys SS, Catalano E, Daly MB, Giles G, Godwin A, Hibshoosh H, Hopper JL, John EM, Layfield L, **Longacre TA**, Miron A, Senie R, Southey MC, West DW, Whittemore AS, Wu H, Andrulis IL, O'Malley FP. BRCA2 mutation-associated breast cancers exhibit a distinguishing phenotype based on morphology and molecular profiles from tissue microarrays. *Am J Surg Pathol*, 2007; 31:121-128.

52. Kong CS, Balzer BL, Troxell ML, Patterson BK, **Longacre TA**. p16^{INK4A} immunohistochemistry is superior to HPV in situ hybridization for the detection of high risk HPV in cervical dysplasia. *Am J Surg Pathol*, 2007; 31:33-43.
53. Norton JA, Ham CM, Van Dam J, Jeffrey RB, **Longacre TA**, Hunstman DG, Chen N, Kurian AW, Ford JM. CDH1 truncating mutations in the E-cadherin gene: an indication for total gastrectomy to treat hereditary diffuse gastric cancer. *Ann Surg*, 2007; 245:873-879.
54. Roost J, Mai H, **Longacre TA**, Van Dam J. Endoscopic mucosal resection of a solitary gastric plasmacytoma. *Digestive Endoscopy*, 2007; 19:139-141.
55. Kong CS, Welton ML, **Longacre TA**. Role of human papilloma virus in squamous cell metaplasia-dysplasia-carcinoma of the rectum. *Am J Surg Pathol*, 2007; 31:919-925.
56. Ota T, Gilks CB, **Longacre TA**, Leung PCK, Auersperg N. HOXA7 in epithelial ovarian cancer: interrelationships between differentiation and clinical features. *Reprod Sci*, 2007;14:605-614.
57. Quiros JA, Van Dam J, **Longacre TA**, Banerjee S. Gastric pyogenic granuloma. *Gastroenterol Hepatology*, 2007; 3:850-855.
58. Wang Y, Ikeda DM, Narasimhan B, **Longacre TA**, Bleicher RJ, Pal S, Jackman RJ, Jeffrey SS. Estrogen receptor negative invasive breast cancer: imaging features of tumors with and without HER2 overexpression. *Radiology*, 2008; 246:367-375.
59. Sangoi AR, Soslow RA, Teng NN, **Longacre TA**. Ovarian clear cell carcinoma with papillary features: a potential mimic of serous tumor of low malignant potential. *Am J Surg Pathol*, 2008; 32:269-274.
60. Sangoi AR, McKenney JK, Dadras SS, **Longacre TA**. Lymphatic vessel invasion in ovarian serous tumors of low malignant potential with stromal microinvasion: a case control study. *Am J Surg Pathol*, 2008; 32:261-268.
61. Han G, Gilks CB, Leung S, Ewanowich CA, Irving JA, **Longacre TA**, Soslow RA. Mixed ovarian epithelial carcinomas with clear cell and serous components are variants of high-grade serous carcinoma: an interobserver correlative and immunohistochemical study of 32 cases. *Am J Surg Pathol*, 32:955-964.
62. Esheba GE, Pate LL, **Longacre TA**. Oncofetal protein glypican-3 distinguishes yolk sac tumor from clear cell carcinoma of the ovary. *Am J Surg Pathol*, 2008; 32:600-607.
63. McKenney JK, Soslow RA, **Longacre TA**. Mucinous epithelial neoplasms associated with mature ovarian teratomas: a clinicopathologic study of 42 cases emphasizing morphologic heterogeneity and associated pseudomyxoma peritonei. *Am J Surg Pathol*, 2008; 32:645-655.

64. McKenney JK, Soslow RA, **Longacre TA**. Low grade mucinous epithelial neoplasm (intestinal type) arising in a mature sacrococcygeal teratoma with late recurrence as pseudomyxoma peritonei. *Hum Pathol*, 2008; 39:629-632.
65. Gütgemann I, Lehman NL, Jackson PK, **Longacre TA**. Emi1 protein accumulation implicates misregulation of the anaphase promoting complex/cyclosome (APC/C) pathway in ovarian clear cell carcinoma. *Mod Pathol*, 2008; 21:445-454.
66. Rogers WM, Dobo E, Norton JA, Van Dam J, Hunstman DG, Chun N, Ford JM, **Longacre TA**. Risk-reducing total gastrectomy for truncating mutations in the E-cadherin gene: new pathologic findings with clinical implications. *Am J Surg Pathol*, 2008; 32:799-809.
67. Jensen KC, Mariappan R, Putcha GV, Schrijver I, Chun N, Ford JM, **Longacre TA**. Microsatellite instability in ovarian epithelial tumors in women 50 years of age and younger: a molecular and immunohistochemical analysis. *Am J Surg Pathol*, 2008; 32:1029-1037.
68. Esheba GE, Atkins KA, **Longacre TA**, Higgins JP. Expression of the urothelial differentiation markers GATA3 and placental S100 (S100P) in female genital tract transitional cell proliferations. *Am J Surg Pathol*, 2009; 33:347-353.
69. Sangoi AR, Rogers WM, **Longacre TA**, Baron EJ, Montoya JG, Banaei N. Challenges and pitfalls of morphologic identification of fungal infections in histology and cytology specimens: a ten-year retrospective review at a single institution. *Am J Clin Pathol* 2009; 131:364-75.
70. Burtelow MA, **Longacre TA**. Utility of microtubule associated protein-2 (MAP-2) for identification of ganglion cells in rectal suction biopsies. *Am J Surg Pathol*. 2009;33:1025-30.
71. Lavie O, **Longacre T**, Segev Y, Husain A. Ovarian carcinosarcomas associated with prolonged use of tamoxifen. *Int J Gynecol Cancer* 2009; 19:1521-1523.
72. Fuentesbella J, Bass D, **Longacre T**, Ro K. Abdominal pain, gastrointestinal bleeding and weight loss in a 17 year old male. *Dig Dis and Sci* 2009; 54:722-724.
73. Callacondo-Riva D, Ganoza-Salas A, Anicama-Lima W, Quispe-Mauricio A, **Longacre TA**. Primary squamous cell carcinoma of the stomach with paraneoplastic leukocytosis: case report and review of the literature. *Hum Pathol*. 2009;40:1494-98.
74. Pai RK, Beck AH, Norton JA, **Longacre TA**. Appendiceal mucinous neoplasms: clinicopathologic study of 116 cases with analysis of factors predicting recurrence. *Am J Surg Pathol*. 2009;33:1425-39.
75. Rosing JH, Jeffrey B, **Longacre TA**, Greco R. Massive extra-adrenal retroperitoneal paraganglioma: pre-operative embolization and resection. *Dig Dis Sci*. 2009;54:1621-24.

76. Sangoi AR, McKenney JK, Schwartz EJ, Rouse RV, **Longacre TA**. Adenomatoid tumors of the female and male genital tracts: a clinicopathological and immunohistochemical study of 44 cases. *Mod Pathol*. 2009; 22:1228-35.
77. Nicholas CR, Haston KM, Grewall AK, **Longacre TA**, Pera RA. Transplantation directs oocyte maturation from embryonic stem cells and provides a therapeutic strategy for female infertility. *Hum Mol Genet*. 2009;18:4376-89.
78. Talisetti A, **Longacre T**, Pai RK, Kerner J. Diversion colitis in a 19-year-old female with megacystis-microcolon-intestinal hypoperistalsis syndrome. *Dig Dis Sci*. 2009;54:2338-40.
79. Kong CS, Beck AH, **Longacre TA**. A panel of three markers including p16, ProEx C, or HPV ISH is optimal for distinguishing between primary endometrial and endocervical adenocarcinomas *Am J Surg Pathol*. 2010;34:915-26.
80. Rankin EB, Fuh K, Ms. Taylor T, Krieg A, Musser M, Yuan J, Wei K, Kuo C, **Longacre T**, Giaccia A. AXL is an essential factor and therapeutic target for metastatic ovarian cancer. *Cancer Res* 2010;70:7570-9.
81. Fujiwara M, **Longacre TA**. Low grade mucinous adenocarcinoma of the uterine corpus: a rare and deceptively bland form of endometrial carcinoma. *Am J Surg Pathol*, 2011; 35:537-44.
82. Mills A, Karamanchandami JR, Vogel H, **Longacre TA**. Endocervical fibroblastic malignant peripheral nerve sheath tumor (neurofibrosarcoma): report of a novel entity possibly related to endocervical CD34 fibrocytes. *Am J Surg Pathol*, 2011;35:404-12.
83. Liu YL, Brown SS, Elihu A, Bonham CA, Conception W, **Longacre TA**, Kamaya A. Hepatic epithelioid hemangioendothelioma. *Dig Dis Sci*, 2011; 56:303-306.
84. Sharaf RN, Levesque BG, Shah S, **Longacre T**, Pasricha PJ. Capsule endoscopy in the diagnosis of suspected small bowel involvement with Crohn's disease. *Dig Dis Sci*. 2011;56:46-8.
85. Mojtahed A, Schrijver I, Ford JM, **Longacre TA**, Pai RK. A 2-antibody mismatch repair protein immunohistochemistry screening approach for colorectal carcinomas, skin sebaceous tumors and gynecologic tract carcinomas. *Mod Pathol*, 2011;24:1004-14.
86. Chen Y, Kingham K, Ford JM, Rosing J, Van Dam J, Jeffry RB, **Longacre TA**, Chun N, Kurian A, Norton JA. A prospective study of total gastrectomy for *CDH1* positive hereditary diffuse gastric cancer (HDGC). *Annals of Surg Oncol*, 2011;18:2594-8.
87. Hunter SM, Gorringer KL, Anglesio MS, Sharma R, Gilks CB, Melnyk N, Chiew YE, Australian Ovarian Cancer Study Group, **Longacre TA**, DeFazio A, Huntsman DG,

Campbell IG. High-resolution genomic analysis reclassification of a subset of benign serous ovarian tumors as fibromas. *Clin Cancer Res*, 2011; 17:7273-82.

88. Goodwin P, Phillips K-A, West D, Ennis M, Hopper J, John E, O'Malley F, Milner R, Andrulis I, **Longacre TA**. Prognosis in BRCA1 and BRCA2 associated breast cancer: results of an international prospective breast cancer family registry population-based cohort study. *J Clin Oncol*, 2012;30:19-26

89. DiMaio MA, **Longacre TA**. Myometrial xanthomatosis: possible relationship to prior pregnancy procedure. *Int J Gynecol Pathol*, 2012;31:174-9.

90. Cuff J, **Longacre TA**. Endometriosis does not confer improved prognosis in ovarian carcinoma of uniform cell type. *Am J Surg Pathol*. 2012;36:688-95.

91. Work ME, Andrulis IL, John EM, Hopper JL, Liao Y, Zhang FF, Knight JA, West DW, Milne RL, Giles GG, **Longacre TA**, O'Malley F, Mulligan AM, Southey MC, Hibshoosh H, Terry MB. Risk factors for uncommon histologic subtypes of breast cancer using centralized pathology review in the Breast Cancer Family Registry. *Breast Cancer Res Treat*. 2012 Apr 25. [Epub ahead of print]

92. Mills AM, Liou S, Kong CS., **Longacre TA**. Are women with endocervical adenocarcinoma at risk for Lynch syndrome? Evaluation of 101 cases including unusual subtypes and lower uterine segment tumors. *Int J Gynecol Pathol*, 2012;31:463-9.

93. Fujiwara M, Anna Felberg A, Whittemore AS, McGuire V, **Longacre TA**. Prediction of *BRCA1* germ line mutation status in women with ovarian cancer using morphology-based criteria: Identification of a *BRCA1* ovarian cancer phenotype. *Am J Surg Pathol*, 2012;36:1170-7.

94. Mills AM, Balasubramaniam R, **Longacre TA**, Kong CS, Pinsky BA. Laboratory-developed L1 sequencing and type-specific, real-time polymerase chain reaction for the detection and typing of human papillomaviruses in formalin-fixed, paraffin-embedded tissues. *Arch Pathol Lab Med*. 2013;137:50-4.

95. Mills AM, Ly A, Balzer BL, Hendrickson MR, Kempson RL, McKenney JK, **Longacre TA**. Cell cycle regulatory markers in uterine atypical leiomyoma and leiomyosarcoma: immunohistochemical study of 60 cases with clinical follow-up. *Am J Surg Pathol*, 2013;37:634-42.

96. Ly A, Mills AM, McKenney JK, Balzer B, Kempson RL, Hendrickson MR, **Longacre TA**. Atypical leiomyomas of the uterus: a clinicopathologic study of 51 cases. *Am J Surg Pathol*, 2013;37:643-9.

97. Bala R, Pinsky BJ, Beck AH, Kong CS, Welton ML, **Longacre TA**. p16^{INK4a} is superior to ProEx C in identifying high grade squamous intraepithelial lesions (HSIL) of the anal canal. *Am J Surg Pathol*, 2013;37:59-68.

98. Lim D, Nucci MR, Gilks CB, **Longacre TA**, Soslow RA, Oliva E. Interobserver variability in the interpretation of tumor cell necrosis in uterine leiomyosarcoma. *Am J Surg Pathol*, 2013;37:650-8.
99. Hazard K, **Longacre TA**. Ovarian surface epithelial neoplasms in the pediatric population: incidence, histologic subtype, and natural history. *Am J Surg Pathol*, 2013; 37:548-53.
100. DeLair D, Han G, Irving JA, Leung S, Ewanowich CA, **Longacre TA**, Gilks CB, Soslow R. HNF-1beta in ovarian carcinomas with serous and clear cell change. *Int J Gynecol Pathol*, 2013;32:541-6.
101. Mahmud N, Ford JM, **Longacre TA**, Parent R, Norton JA. Metastatic lobular breast carcinoma mimicking primary signet ring adenocarcinoma in a patient with a suspected CDH1 mutation. *J Clin Oncol*. 2014 Mar 3. [Epub ahead of print].
102. Sieh W, Köbel M, **Longacre TA**, Bowtell DD, DeFazio A, Goodman MT, Høgdall E, Deen S, Wentzensen N, Moysich KB, Brenton JD, Clarke B, Menon U, Gilks B, Andre Kim A, Madore J, Fereday S, George J, Galletta L, Lurie G, Wilkens LR, Carney ME, Thompson PJ, Matsuno RK, Krüger Kjær S, Jensen A, Høgdal C, Kalli KR, Fridley BL, Keeney GL, Vierkant RA, Cunningham JM, Brinton LA, Yang HP, Sherman ME, Garcia-Closas M, Lissowska J, Odunsi K, Morrisison C, Lele S, Bshara W, Sucheston L, Jimenez-Linan M, Blows FM, Alsop J, Mack M, McGuire V, Rothstein JH, Rosen B, Bernardini M, Mackay H, Oza A, Wozniak EL, Benjamin E, Gentry-Maharaj A, Gayther SA, Tinker AV, Prentice LM, Chow C, Anglesio MS, Johnatty SE, Chenevix-Trench G, Whittemore AS, Pharoah PDP, Goode EL, Huntsman DG, Ramus SJ. Progesterone receptor and estrogen receptor are prognostic biomarkers for ovarian cancer: an Ovarian Tumor Tissue Analysis consortium study. *Lancet Oncol*, 2013;14:853-62.
103. Pan LY, Offman SL, Warnke RA, **Longacre TA**. Uterine Rosai-Dorfman disease (sinus histiocytosis with massive lymphadenopathy). *Int J Gynecol Pathol*. 2014;33:432-6.
104. Wong RJ, **Longacre TA**, Poultides G, Park W, Rothenberg ME. Gastrointestinal stromal tumor: an unusual cause of gastrointestinal bleeding. *Dig Dis Sci*, 2013;58:3112-6.
105. McCluggage WG, **Longacre TA**, Fisher C. Myogenin expression in vulvovaginal spindle cell lesions: analysis of a series of cases with emphasis on diagnostic pitfalls. *Histopathology*, 2013;63:545-50.
106. Mojtahed A, Pai RK, Seo K, Anderson MW, Fisher G, Arber DA, **Longacre TA**. Reactive lymphoid hyperplasia of the terminal ileum: a benign (“lymphoma-like”) condition that may harbor aberrant immunohistochemical patterns or clonal immunoglobulin heavy chain gene rearrangements. *Appl Immunohistochem Mol Morphol*. 2014 Jun 3. [Epub ahead of print].

107. Cuff, J, Salari K, Clarke N, Esheba GE, Forster AD, Huang S, West RB, Higgins JP, **Longacre TA**, Pollack JR. Integrative bioinformatics links HNF1 α with clear cell carcinoma and tumor-associated thrombosis. PLoS ONE, 2013;8: e74562.

108. Eberlin LS, Tibshirani R, Zhang J, **Longacre TA**, Berry G, Bingham DB, Norton JA, Zare RN, Poultides GA Molecular assessment of gastric cancer surgical resection margins by mass spectrometric imaging. Proc Natl Acad Sci U S A. 2014;111:2436-41.

109. McVeigh G, Shah V, **Longacre TA**, McCluggage WG. Endometrial involvement in pseudomyxoma peritonei secondary to low grade mucinous appendiceal neoplasm: report of two cases. Int J Gynecol Pathol, 2014, In Press.

110. Clay MR, Allison KH, Folkins AK, **Longacre TA**. Risk of secondary malignancy (including breast) in patients with mismatch repair protein deficiency. Am J Surg Pathol. 2014 Jun 11. [Epub ahead of print].

111. Zhang H, Cohen AL, Krishnakumar S, Wapnir IL, Veeriah S, Deng G, Coram MA, Piskun CM, **Longacre TA**, Herrler M, Frimannsson DO, Telli ML, Dirbas FM, Matin AC, Dairkee SH, Larijani B, Glinsky GV, Bild AH, Jeffrey SS. Patient-derived xenografts of triple-negative breast cancer reproduce molecular features and PIK3CA mutations of patient tumors and respond to mTOR inhibition. Breast Cancer Res. 2014 Apr 7;16(2):R36. [Epub ahead of print].

112. Cloyd JM, Brown J, Sinclair T, Jenks D, Desai J, **Longacre T**, Chandra V, Shelton A. Gastrointestinal mucormycosis initially manifest as hematochezia from arterio-enteric fistula. Dig Dis Sci. 2014 Jun 7. [Epub ahead of print]

113. Martin BA, Kerner JA, Hazard FK, **Longacre TA**. Evaluation of intestinal biopsies for pediatric enteropathy: A proposed immunohistochemical panel approach. Am J Surg Pathol. 2014;38:1387-95.

114. Mills AM, Liou S, Ford JM, Berek JS, Pai RK, **Longacre TA**. Lynch syndrome screening should be considered for all patients with newly diagnosed endometrial cancer. Am J Surg Pathol..

115. Nadauld L, Regan JF, Miotke L, Pai RK, **Longacre TA**, Kwok SS, Saxonov S, Ford JM, Hanlee PJ Quantitative and sensitive detection of cancer genome amplifications from formalin fixed paraffin embedded tumors with droplet digital PCR. Transl Med (Sunnyvale). 2012; 2(2): 1000107.

116. Erdrich J, Kastenber ZJ, DiMaio MA, **Longacre TA**, Rhoads KF. Collateral damage: taxane-induced colonic perforation. Dig Dis Sci. 2014 Aug 1. [Epub ahead of print].

117. Chen EC, Kalisky T, Gupta SK, O'Brien CA, **Longacre TA**, van de Rijn M, Karl TA, Quake SR, Clarke MF, Rothenberg ME. KIT promotes growth of KIT+ human colon cancers. *Gastroenterology*. In Press.

118. Kozak M, **Longacre TA**, Chang D. Smad4 inactivation predicts for worse prognosis and response to fluorouracil-based treatment in colorectal cancer. *Journal of Clin Pathol*. In Press.

MANUSCRIPTS SUBMITTED

1. **Longacre TA**, Zhou B, McGuire V, Sieh W, Kurian A, Ford JM, Felberg A, Mills M, Whittemore AS. BRCA1-related cancers are similar to sporadic ovarian cancer but differ from sporadic breast cancer. Submitted.

2. McKenney JK, Gilks CB, Kalloger S, **Longacre TA**. Classification of extraovarian implants in patients with ovarian serous tumors of low malignant potential (borderline tumors): A risk model for disease progression. Submitted.

3. Ahn G, McKenney, JK, **Longacre TA**. Low grade serous carcinoma of the ovary: Patterns of “destructive” stromal invasion. Submitted.

4. DiMaio MA, Park WG, **Longacre TA**. Gastric *Sarcina* organisms in a patient with cystic fibrosis. Submitted.

5. Chisholm KM, **Longacre TA**. The utility of peripherin versus MAP-2 and calretinin in the evaluation of Hirschsprung Disease. Submitted.

BOOKS AND BOOK CHAPTERS

1. **Longacre TA**, Fenoglio-Preiser CM: Flow cytometry: Application to Oncology. In *Comprehensive Textbook of Oncology*, 2nd Edition, Moossa AR, Robson MC, Schimpff SC (eds), Williams and Wilkins, Baltimore, 1991; 276-285.

2. Fenoglio-Preiser CM, Listrom MB, **Longacre TA**: Oncogenes and tumor suppressor genes in solid tumors: Neural tumors. In *Molecular Diagnostics in Pathology*, Fenoglio-Preiser CM, Willman CL (eds), Williams and Wilkins, Baltimore, 1991; 167-188.

3. Fenoglio-Preiser CM, **Longacre TA**, Listrom MB: Oncogenes and tumor suppressor genes in solid tumors: Gastrointestinal tract. In *Molecular Diagnostics in Pathology*, Fenoglio-Preiser CM, Willman CL (eds), Williams and Wilkins, Baltimore, 1991; 189-218.

4. Fenoglio-Preiser CM, **Longacre TA**, Listrom MB: Oncogenes and tumor suppressor genes in solid tumors: Breast, gynecologic and urologic tumors. In *Molecular Diagnostics in Pathology*, Fenoglio-Preiser CM, Willman CL (eds), Williams and Wilkins, Baltimore, 1991; 219-260.

5. Fenoglio-Preiser CM, Listrom MB, **Longacre TA**: Oncogenes and tumor suppressor genes in

solid tumors: Lung, endocrine, skin, salivary gland, head and neck, and soft tissue tumors. In *Molecular Diagnostics in Pathology*, Fenoglio-Preiser CM, Willman CL (eds), Williams and Wilkins, Baltimore, 1991; 261-288.

6. **Longacre TA**, Fenoglio-Preiser CM: Value of colorectal biopsies - a critical appraisal. In *The Large Intestine: Physiology, Pathophysiology and Diseases*, Philips SF, Pemberton JH, Shorter RG (eds), Raven Press, 1991; 303-333.

7. Fenoglio-Preiser CM, **Longacre TA**, Listrom MB, Blume P: Analysis of cellular markers in IBD: Immunohistochemistry, in situ hybridization, and beyond. In *Dysplasia and Cancer in Colitis*, Riddell RH (ed), Elsevier, New York, NY, 1991;28:181-198.

8. **Longacre TA**, Kempson RL, Hendrickson MR: Well-differentiated serous neoplasms of the ovary. In *Pathology: State of the Art Reviews*, Hendrickson MR (ed), Hanley and Belfus, Inc., Philadelphia, PA, 1993;1:255-306.

9. Hendrickson MR, **Longacre TA**, Kempson RL: The clinicopathology of malignant surface epithelial neoplasms of the ovary. In *Pathology: State of the Art Reviews*, Hendrickson MR (ed), Hanley and Belfus, Inc., Philadelphia, PA, 1993;1:367-410.

10. Hendrickson MR, **Longacre TA**: The classification of surface epithelial neoplasms of the ovary. In *Pathology: State of the Art Reviews*, Hendrickson MR (ed), Hanley and Belfus, Inc., Philadelphia, PA, 1993;1:189-254.

11. **Longacre TA**, Hendrickson MR, Kempson, RL: Endometrial hyperplasia, metaplasia and carcinoma. In *Obstetrical and Gynaecological Pathology*, Fox H (ed), Churchill and Livingstone, New York, NY, 1995;421-510.

12. **Longacre TA**, Teng NNH, Hendrickson MR: The gynecologic frozen section. In *Pathology: State of the Art Reviews*, Ranchod M (ed), Hanley and Belfus, Inc., Philadelphia, PA, 1996; 3:427-492.

13. **Longacre TA**, Hendrickson MR: Mesenchymal tumors. In *Atlas of Gynecology, Vol II: Gynecologic Pathology*, Current Medicine, Philadelphia, PA, 1997; 6.1-6.17.

14. Hendrickson MR, **Longacre TA**, Kempson RL: The uterine corpus. Evaluation of endometrial and myometrial specimens. In *Diagnostic Surgical Pathology*, Sternberg SS (ed), Raven Press, New York, NY, 1999.

15. Hendrickson MR, **Longacre TA**. Problems in uterine corpus pathology: In *Gynecologic Cancer: Controversies in Management*, Gershenson DM, Gore M, McGuire WP, Thomas G, and Quinn MA (ed), Elsevier, Philadelphia, PA, 2004.

16. Hendrickson MR, **Longacre TA**, Kempson RL: The uterine corpus. Evaluation of endometrial and myometrial specimens. In *Sternberg's Diagnostic Surgical Pathology*, Mills SE (ed), Lippincott Williams and Wilkins, New York, NY, 2004.

17. Hendrickson MR, **Longacre TA**, Kempson RL. Pathology of uterine sarcomas. In *Cancer of the Uterus*, Coukos G and Rubin SC and (eds), Marcel Dekker, New York, NY, 2005.
18. Pai RK, **Longacre TA**. Pseudomyxoma peritonei syndrome: Classification of appendiceal mucinous tumors. *Peritoneal Carcinomatosis: A Multidisciplinary Approach*, Ceelen W (ed), Cancer Treatment and Research Series, Springer, 2007.
19. **Longacre TA**, Gilks CB. Nonneoplastic lesions of the ovary. In *Gynecologic Pathology*, Nucci MR and Oliva E (eds), *Foundations in Diagnostic Pathology*, Goldblum JR (Series ed) Churchill Livingstone, Elsevier, Philadelphia, PA, 2009;367-391.
20. **Longacre TA**, Gilks CB. Surface epithelial stromal tumors of the ovary. In *Gynecologic Pathology*, Nucci MR and Oliva E (eds), *Foundations in Diagnostic Pathology*, Goldblum JR (Series ed), Churchill Livingstone, Elsevier, Philadelphia, PA, 2009; 393-444.
21. **Longacre TA**, Atkins K, Hendrickson MR, Kempson RL: The uterine corpus. In *Sternberg's Diagnostic Surgical Pathology*, Mills SE (ed), Fifth Edition, Lippincott Williams and Wilkins, New York, NY, 2009; 2184-2278.
22. Kong CS, **Longacre TA**, Hendrickson MR. Pathology. In *Berek and Hacker's Gynecologic Oncology*, Berek JS and Hacker NF (Ed), Fifth Edition, Lippincott Williams and Wilkins, Philadelphia, PA, 2009;121-214.
23. Mills AM, **Longacre TA**. Smooth muscle tumors of the female genital tract. In *Current Concepts in Gynecologic Pathology: Mesenchymal Tumors of the Female Genital Tract*. Oliva E (Ed), *Surgical Pathology Clinics*, W.B. Saunders, New York, NY, 2009; Vol 2, 625-678.
24. **Longacre TA**, Berek JS, Hendrickson MR. The Gynecologic Frozen Section, In *Frozen Section Diagnosis in Pathology*, Ranchod M (Ed), 2010.
25. **Longacre TA**. Benign and low grade serous epithelial tumors: recent developments and diagnostic problems. In: *Current Concepts in Gynecologic Pathology: Epithelial Tumors of the Gynecologic Tract*. Soslow RA (Ed.), *Surgical Pathology Clinics*, W.B. Saunders, New York, NY, 2011; Vol 4, 331-374.
26. Mills AM, **Longacre TA**. Atypical endometrial hyperplasia and well differentiated endometrioid adenocarcinoma of the uterine corpus. In: *Current Concepts in Gynecologic Pathology: Epithelial Tumors of the Gynecologic Tract*. Soslow RA (Ed.), *Surgical Pathology Clinics*, W.B. Saunders, New York, NY, 2011; Vol 4, 149-198.
27. Berek JS. **Longacre TA**, Friedlander M. Ovarian, fallopian tube, and peritoneal cancer. In *Berek and Novak's Gynecology*, Berek JS (Ed), Fifteenth Edition, Lippincott Williams and Wilkins, Philadelphia, PA, 2012.
28. **Longacre TA** and Soslow RA. *The Uterine Corpus and Cervix*, Cambridge University Press,

Weiss L (Ed), New York, NY, 2012.

29. Kitayama J, **Longacre TA**. Breast Anatomy: Normal Histology. In *Practical Breast Pathology: A Diagnostic Approach. A Volume in the Pattern Recognition Series*. Atkins KA and Kong CS (Ed.), Philadelphia, Churchill Livingstone Elsevier. 2013

30. Rogers W, **Longacre TA**. Sentinel Lymph Nodes. In *Practical Breast Pathology: A Diagnostic Approach. A Volume in the Pattern Recognition Series*. Atkins KA and Kong CS (Ed.), Philadelphia, Churchill Livingstone Elsevier, 2013.

31. Rabban JT, **Longacre TA**. Immunohistochemistry of the Female Genital Tract. In *Diagnostic Immunohistochemistry*, Dabbs D (Ed), 4th Edition, Elsevier, Philadelphia, PA. 2014.

32. Folkins A, **Longacre TA**, Crum, C. Hereditary Ovarian Cancer. In *Pathobiology of Human Disease: A Dynamic Encyclopedia of Disease Mechanisms*. Mitchell R (Ed), Elsevier, Philadelphia, PA, In Press.

33. Seidman JD, Bell DA, Crum CP, Gilks CB, Kurman RJ, Levine DA, **Longacre TA**, Pasini B, Riva C, Sherman ME, Shih I.M., Singer G, Soslow R, Vang R. Tumours of the Ovary: Serous Tumours. In *World Health Organization (WHO) Classification of Tumours of Female Reproductive Organs*, Kurman RJ, Carcangiu ML, Herrington CS, Young RH (Ed), 4th edition, IARC, Lyon, France, 2014, 17-24.

34. Gilks CB, Bell DA, Huntsman D, **Longacre TA**, Oliva E, Soslow R, Tsuda H, Zanonni GF, Zhao C, Zhou X. Tumours of the Ovary: Clear Cell Tumours. In *World Health Organization (WHO) Classification of Tumours of Female Reproductive Organs*, Kurman RJ, Carcangiu ML, Herrington CS, Young RH (Ed), 4th edition, IARC, Lyon France, 2014, 33-37.

35. Oliva E, Carcangiu MR, Carinelli SG, Ip P, Loening T, **Longacre TA**, Nucci MR, Prat J, Zaloudek CJ. Tumours of the Uterine Corpus: Mesenchymal Tumours. In *World Health Organization (WHO) Classification of Tumours of Female Reproductive Organs*, Kurman RJ, Carcangiu ML, Herrington CS, Young RH (Ed), 4th edition, IARC, Lyon France, 2014, 135-147.

36. **Longacre TA**, Bell DA, Malpica A, Prat J, Ronnett BM, Sediman JD, Vang R. Tumours of the Ovary: Mucinous Tumours. In *World Health Organization (WHO) Classification of Tumours of Female Reproductive Organs*, Kurman RJ, Carcangiu ML, Herrington CS, Young RH (Ed), 4th edition, IARC, Lyon, France, 2014, 25-28.

37. **Longacre TA**, Wells M. Tumours of the Ovary: Serous Tumours. Introduction to Serous Tumours – Pelvic Serous Neoplasia. In *World Health Organization (WHO) Classification of Tumours of Female Reproductive Organs*, Kurman RJ, Carcangiu ML, Herrington CS, Young RH (Ed), 4th edition, IARC, Lyon, France, 2014, 15-16.

38. **Longacre TA**, Atkins K, Hendrickson MR, Kempson RL. The Uterine Corpus. In *Sternberg's Diagnostic Surgical Pathology*, Mills SE (Ed), Sixth Edition, Lippincott Williams and Wilkins, New York, NY, In Press.

39. **Longacre TA**, Mills SE. The Vulva. In *Sternberg's Diagnostic Surgical Pathology*, Mills SE (Ed), Sixth Edition, Lippincott Williams and Wilkins, New York, NY, In Press.

40. Greenson J, **Longacre TA**, Reuter V (Associate Editors), *Sternberg's Diagnostic Surgical Pathology*, Mills SE (Editor), Sixth Edition, Lippincott Williams and Wilkins, New York, NY, In Press.

41. Kong CS, **Longacre TA**, Hendrickson MR. Pathology. In *Berek and Hacker's Gynecologic Oncology*, Berek JS and Hacker NF (Ed), Sixth Edition, Lippincott Williams and Wilkins, Philadelphia, PA, In Press.

BOOKS AND BOOK CHAPTERS IN PREPARATION

1. **Longacre TA** (Chief Editor), Gynecologic Pathology, eMedicine from *WebMD* (www.emedicine.com), In Preparation.

2. **Longacre TA**. Anal Pathology In *Anal Cancer*, Welton ML and Thomas Jr., CR. Demos Medical Publishing, LLC, New York, NY. In Preparation

INVITED MONOGRAPHS, REVIEWS, AND COMMENTARY

1. **Longacre TA**, Listrom MB, Fenoglio-Preiser CM. Zollinger Ellison syndrome with microcarcinoidosis. *ASCP Check-Sample, Anatomic Pathology* 1989; II No. APII 89-5 (APII-149).

2. **Longacre TA**, Foucar K. Red (blood) cell aplasia (transient erythroblastopenia of childhood) with increased bone marrow hematogones. *ASCP Check-Sample, Hematology* 1989; NoH89-9 (H212).

3. **Longacre TA**, Fenoglio-Preiser CM. Colorectal biopsies. *Prog Surg Pathol* 1990; 11:27-53.

4. **Longacre TA**, Rouse RV: CD31: A potential new marker for vascular neoplasia. *Adv Anat Pathol* 1994; 1:16.

5. Hendrickson MR, **Longacre TA**, Kempson RL: Uterine papillary serous carcinoma revisited [Editorial; comment]. *Gynecol Oncol* 1994; 54:261-263.

6. **Longacre TA**, Hendrickson MR: Small cell carcinoma of the ovary, hypercalcemic type: the evolution of a clinicohistopathologic syndrome. *Adv Anat Pathol* 1995; 2:386-393.

7. Orenstein JM, Kotler DP: Diarrheogenic bacterial enteritis in acquired immune deficiency syndrome: a light and electron microscopy study of 52 cases [Commentary by **Teri A Longacre**]. *Adv Gastroenterol Hepatol Clin Nutr* 1996; 1:48-53.

8. **Longacre TA**, Hendrickson MR, Kempson RL: Predicting clinical outcome for uterine

smooth muscle neoplasms with a reasonable degree of certainty. *Adv Anat Pathol* 1997;4:95-104.

9. **Longacre TA**, Hendrickson MR. Distinguishing primary ovarian surface epithelial neoplasms from epithelial metastases to the ovary. *Pathology Case Reviews* 1997;2:1-10.

10. Shibata A, Parsonnet J, **Longacre TA**, Garcia MI, Puligandla B, Davis, RE, Vogelmann JH, Orentreich N, Habel LA: CagA status of *Helicobacter pylori* infection and p53 gene mutations in gastric adenocarcinoma. *Carcinogenesis* 2003;24:147 [Letter to the Editor (Response)].

11. Balzer BL, **Longacre TA**. Aggressive angiomyxoma of the female genital tract. *Pathology Case Reviews*, 2005;10:46-54.

12. **Longacre TA**, Kempson RL, Hendrickson MR. Serous borderline tumors of the ovary: serous tumors of low malignant potential (serous borderline tumors). *Moving Toward Détente. Histopathology* 2005; 47:310-318.

13. Pai RK, **Longacre TA**. Appendiceal mucinous tumors and pseudomyxoma peritonei: histologic features, diagnostic problems and proposed classification. *Adv Anat Pathol* 2005;13:304-310.

14. **Longacre TA**, Oliva E, Soslow RA Recommendations for the reporting of fallopian tube malignancies. ADASP Checklist and Guidelines for Surgical Pathology Reporting of Malignant Neoplasms. Association of Directors of Anatomic and Surgical Pathology. *Virchow Archives* 2007; 450:25-29.

15. **Longacre TA**, Oliva E, Soslow RA. Recommendations for the reporting of fallopian tube malignancies. ADASP Checklist and Guidelines for Surgical Pathology Reporting of Malignant Neoplasms. Association of Directors of Anatomic and Surgical Pathology. *Hum Pathol* 2007; 38:1160.e1-1160.e7

16. **Longacre TA**, Kong CS, Welton ML. Diagnostic problems in anal pathology. *Adv Anat Pathol* 2008;15:263-278.

17. McKenney JK and **Longacre TA**. Low grade endometrial adenocarcinoma: an algorithm for distinguishing atypical endometrial hyperplasia and other benign (& malignant) mimics. *Adv Anat Pathol* 2009; 16:1-22.

18. Mills AM, **Longacre TA**. Endometrial hyperplasia. *Seminars in Diagnostic Pathology* 2010; 27:199-214.

19. Gilks CB, Clarke BA, Han G, Köbel M, **Longacre T**, McCluggage WG, Seidman JD, Shaw P, Soslow RA. Letter to the editor regarding 'Roh MH, Lassin Y, Miron A et al. High-grade fimbrial-ovarian carcinomas are unified by p53, PTEN and PAX2 expression'. *Mod Pathol* 2011;24:1281-2.

20. Offman S and **Longacre TA**. Clear cell carcinoma of the female genital tract. *Adv Anat Pathol* 2012; 19:296-312.

21. Folkins A and **Longacre TA**. Hereditary cancer syndromes in the female genital tract. *Histopathology* 2013;62:2-30.

22. Conklin CMJ and **Longacre TA**. Lynch syndrome in endometrial carcinoma: a sentinel diagnosis. *Pathology Case Reviews* 2014, In Press.

23. Norton JA, Zemek A, Longacre TA, Jensen RT. Controversies in the surgical management of neuroendocrine tumors in patients with Multiple Endocrine Neoplasia Type 1 (MEN-1), Submitted.

24. Conklin CMJ and **Longacre TA**. Endometrial stromal tumors: support for a new classification. *Adv Anat Pathol* 2014, In Press.

INVITED MONOGRAPHS AND COMMENTARY (IN PREPARATION)

1. McKinney JK and **Longacre TA**. CF Fluhman: erosions, clefts, and tunnels in the uterine cervix. *Int J Gynecol Pathol*, In Preparation.

ABSTRACTS (NOT PUBLISHED ELSEWHERE)

1. Hildebrandt RH, **Longacre TA**, Willman C, Hoffman C, Bartow S: Non-malignant human breast tissue expresses the int-2 proto-oncogene. United States and Canadian Academy of Pathology, *Winner of the Stowell-Orbison Award*, March, 1989.

2. Garcia MI, Parsonnet J, **Longacre T**, Puligandla B, Habel L, Vogelmann J, Orentreich N, Shibata A: Cell proliferation and p53 abnormality in gastric cancer by *Helicobacter pylori* phenotype and tumor histologic type. American Association for Cancer Research, San Francisco, CA, April, 2000.

3. West RB, Linn SC, Nielsen T, Zhu S, **Longacre T**, Husain A, Alter O, Patel R, Brown PO, Botstein D, Rubin BP, Goldblum JR, van de Rijn M. Distinction between low grade endometrial stromal sarcoma and smooth muscle tumors by cDNA gene array analysis. United States and Canadian Academy of Pathology, Chicago, IL, March, 2002.

4. Balzer B, Schaner M, Ross D, Montgomery K, Teng N, Sikic B, **Longacre T**. Protein expression study of ovarian surface epithelial neoplasms using tissue microarray analysis: emergence of a clear cell signature profile. *Mod Pathol* 16:181A, 2003.

5. Gilks CB, McKenney JK, Kalloger S, **Longacre T**. Interobserver variation in the assessment of extra-ovarian implants of serous borderline tumors (serous tumors of low malignant potential). *Mod Pathol* 18:184A, 2005.

6. McKenney JK, Gilks CB, **Longacre TA**. Classifications of extra-ovarian implants associated

with ovarian serous tumors of low malignant potential (S-LMP). A clinicopathologic study of 181 cases. *Mod Pathol* 18:195A, 2005.

7. West RB, Gilks CB, van de Rijn M, **Longacre TA**. Stromal signatures in ovarian serous tumors of low malignant potential and serous carcinoma. *Mod Pathol* 19:201A, 2006.

8. Silva E, Vang R, Kurman R, Prat J, **Longacre T**. Invasive implants of serous borderline ovarian neoplasms – a multiinstitutional study. *Mod Pathol* 19:197A, 2006.

9. Ford JM, Chun N, Van Dam J, Jeffrey RB, **Longacre TA**, Norton J. Hereditary diffuse gastric cancer: patients identified clinically versus by genetic screening. ASCO GI conference, Orlando, FL. January 19, 2007.

10. Rogers W, Mulligan AM, Bane A, West D, Andrulis I, Whittemore A3, Senie R, O'Malley FP, John EM, **Longacre TA**. Histologic characterization of in situ carcinoma in BRCA1 and BRCA2 mutation carriers without invasive disease: a population-based study. *Mod Pathol* 2008;21:52A.

11. Kitayama J, **Longacre TA**, Liou S, Ma L, Arber D, Pai RK. MLH1-deficient ovarian and endometrial carcinomas most often result from epigenetic silencing of MLH1 by promoter hypermethylation and do not harbor *BRAF* V600e mutations: implications for identifying patients with Lynch syndrome (LS). *Mod Pathol* 2011;24:252A.

12. Cruise M, **Longacre TA**, Stelow E. Loss of PTEN expression but intact expression of mismatch repair proteins (MLH-1 and MSH-2) in atypical polypoid adenomyomas of the uterus. *Mod Pathol* 2011;24:242A.

13. DiMaio MA, Beck AH, Montgomery KD, West RB, **Longacre TA**, Kong CS. PAX8 and WT1 are superior to PAX2 and BRST2 in distinguishing mullerian tract tumors from breast carcinomas. *Mod Pathol* 2011;24:243A.

14. Mills AM, Pai RK, Liou S, **Longacre TA**. Clinicopathologic features of sporadic endometrial carcinomas with MLH1 promoter hypermethylation: a study of 54 cases. *Mod Pathol* 2011;24:260A.

15. DiMaio MA, Pai RK, **Longacre TA**. PAX8 differentiates gastrointestinal carcinomas from mucinous carcinomas of the ovary, but not mucinous carcinomas arising in ovarian teratomas. *Mod Pathol* 2012;25:266A.

16. Karnezis AN, Jalas JR, Li Y, Lau Y-FC, Chen L-M, **Longacre TA**, Zaloudek CJ. A clinicopathological and immunohistochemical study of 54 cases of dysgerminoma and gonadoblastoma. *Mod Pathol* 2012;25:280A.

17. Moore FN, Pan L, **Longacre TA**. Endometriosis-associated carcinomas exhibit significant site-specific differences: analysis of 396 cases. *Mod Pathol* 2012;25:288A.

18. Offman SL, Liou S, Mills AM, **Longacre TA**. A clinicopathologic analysis of 419 consecutive endometrial carcinomas with emphasis on lower uterine segment tumors. Mod Pathol 2012;25:290A-291A.

19. Pan LY, Moore FN, **Longacre TA**. Mesonephric-like endometrioid glandular proliferations: a morphologically distinct form of metaplasia. Mod Pathol 2012;25:291A.

20. Cuff J, **Longacre TA**, Arber DA. Quality assurance impact of diagnostic discrepancies. Mod Pathol 2012;25:497A.

FORMER GRANT SUPPORT

Co-Investigator, Epidemiology of Helicobacter Pylori Transmission, NIH Grant R01 AI042801, for the period 03/01/06 – 02/28/11, 1%

Co-Investigator, Epigenetic Changes and Phenotype-Specific Therapeutic Strategies in Breast Cancer, University of Utah, R01 GM085601-01, for the period 07/01/08 – 6/30/12, 5%

Principle Investigator, Caring For Carcinoid Foundation Neuroendocrine Tumor Biospecimen Consortium, Caring For Carcinoid Foundation, for the period 01/01/09 - 12/31/10, 1%

CURRENT GRANT SUPPORT

Co-Investigator, Molecular Diagnosis of Human GI Cancers for Surgical Tumor Margin Assessment Using Ambient Mass Spectrometry, Stanford Hospital & Clinics: Innovation Fund Award, for the period 11/15/12 – 11/14/13, 2%

Co-Principal Investigator, A Tissue Microarray for Neuroendocrine Tumors, Developmental Cancer Research Award, Stanford Cancer Institute, for the period 11/1/13 – 11/1/14, 5%

Teri Longacre

Reliance List
in Addition to Materials Referenced in Report

MDL Wave 1

Abdel-fattah. Prospective Randomized Controlled Trial of Transobturator Tapes in management of Urodynamic Stress Incontinence in Women: 3-Year Outcomes from the Evaluation of Transobturator Tapes Study. EUROPEAN UROLOGY 62 (2012) 843 – 851
Abdelmonem AM. Vaginal length and incidence of dyspareunia after total abdominal versus vaginal hysterectomy. European Journal of Obstetrics & Gynecology and Reproductive Biology 151 (2010) 190-192
Abed, H. Incidence and management of graft erosion, wound granulation, and dyspareunia following vaginal prolapse repair with graft materials: a systematic review. Int Urogynecol J (2010)
Aigmueller, T. Ten-year follow-up after the tension-free vaginal tape procedure. Am J Obstet Gynecol 2011;205:1.e1-1.e5
Altman MD, et al. Anterior Colporrhaphy versus Transvaginal Mesh for Pelvic-Organ Prolapse. N Engl J Med 2011;364:1826-36
Amid, PK. Classification of biomaterials and their related complications in abdominal wall hernia surgery. Hernia (1997) 1:15-21
Barbolt. Biology of Polypropylene/polyglactin 910 grafts. Int Urogynecol J (2006) 17: S26 S30
Benbouzid S. Pelvic Organ Prolapse transvaginal repair by the Prolift: 4.5 yr follow-up. International Journal of Urology (2012) 19, 1010–1016
Bendavid, R. A mechanism of mesh-related post-herniorrhaphy neuralgia. (2015)
Bendavid, R. Mesh-related SIN syndrome. A surreptitious irreversible neuralgia and its morphologic background in the etiology of post-herniorrhaphy pain. International Journal of Clinical Medicine, 2014, 5, 799-810.
Binnebosel. Biocompatibility of prosthetic meshes in abdominal surgery . Semin Immunopathol (2011) 33:235 243
Boulanger. Bacteriological analysis of meshes removed for complications after surgical management of urinary incontinence or pelvic organ prolapsed. Int Urogynecol J (2008) 19:827-831
Boulanger. Development of an animal model to study meshes used in genital prolapse surgery. European Journal of Obstetrics & Gynecology and Reproductive Biology 136 (2008) 254 259
Boulanger. Tissue integration and tolerance to meshes used in gynecologic surgery: An experimental study. European Journal of Obstetrics & Gynecology and Reproductive Biology 125 (2006) 103 108
Bracco. Comparison of polypropylene and polyethylene terephthalate (Dacron) meshes for abdominal wall hernia repair: A chemical and morphological study. Hernia (2005) 9: 51 55
Bringman. Hernia repair: the search for ideal meshes. Hernia (2010) 14:81 87
Capobianco, G. TVT-Abbrevio: efficacy and two years follow-up for the treatment of stress urinary incontinence. (2014)
Carey M. Vaginal repair with mesh versus colporrhaphy for prolapse: a randomised controlled trial. BJOG 2009;116:1380–1386
Clave. Polypropylene as a reinforcement in pelvic surgery is not inert: comparative analysis of 100 explants. Int Urogynecol J (2010) 21:261–270
Collinet. The safety of the inside-out transobturator approach for transvaginal tape (TVT-O) treatment in stress urinary incontinence: French registry data on 984 women. Int Urogynecol J (2008) 19:711–715
Conze. Polypropylene in the intra-abdominal position: Influence of pore size and surface area. Hernia (2004) 8: 365 372
Costello. Characterization of Heavyweight and Lightweight Polypropylene Prosthetic Mesh Explants from a Single Patient. Surgical Innovation Volume 14 Number 3, September 2007 168-176
Costello. Materials Characterization of Implanted Polypropylene Hernia Meshes. J Biomed Mater Res Part B: Appl Biomater 83B: 44–49, 2007
Cox, A. Surgical management of female SUI: is there a gold standard? Nat. Rev. Urol. 10, 78–89 (2013)
Cozad. Materials characterization of explanted polypropylene, polyethylene terephthalate, and expanded polytetrafluoroethylene composites: Spectral and thermal analysis. (2010) Wiley InterScience
de Landsheere L. Surgical intervention after transvaginal Prolift mesh repair: retrospective single-center study including 524 patients with 3 years' median follow-up. Am J Obstet Gynecol 2012;206:83.e1-7
de Leval, J. The original versus a modified inside-out transobturator procedure: 1 year results of a prospective randomized trial. Int Urogynecol J (2011) 22:145-156.
Deprest. The biology behind fascial defects and the use of implants in pelvic organ prolapse repair. Int Urogynecol J (2006) 17: S16 S25
Dietz, H. Does the tension-free vaginal tape stay where you put it? (2003)

Elmer. Histological Inflammatory Response to Transvaginal Polypropylene Mesh for Pelvic Reconstructive Surgery. THE JOURNAL OF UROLOGY, Vol. 181, 1189-1195, March 2009
Engelsman. In Vivo Evaluation of Bacterial Infection Involving Morphologically Different Surgical Meshes. Ann Surg 2010;251: 133-137
Falconer, C. Influence of Different Sling Materials on Connective Tissue Metabolism in Stress Urinary Incontinent Women. Int Urogynecol J (2001) (Suppl 2):S19 S23
Ford (Cochrane Review (FULL) Mid-urethral sling operations for stress urinary incontinence in women. (2015)
Ford Ogah. Summary Cochrane Review Mid-urethral sling operations for stress urinary incontinence in women. (2015)
Francis, W. Dyspareunia following vaginal operations. (1961)
Gad, N., Outcome of Prolift mesh repair in treatment of pelvic organ prolapse and its effect on lower urinary tract symptoms: 5-year retrospective case study, J Obstet Gynaecol Res. 2013 Jan;39(1):243-9
Groutz, A. Ten-Year Subjective Outcome Results of the Retropubic Tension-Free Vaginal Tape for Treatment of Stress Urinary Incontinence. J Min Invasive Gynecology (2011) 18, 726-729
Halaska M. A multicenter, randomized, prospective, controlled study comparing sacrospinous fixation and transvaginal mesh in the treatment of posthysterectomy vaginal vault prolapse, Am J Obstet Gynecol. 2012 Oct;207(4):301.e1-7
Heinonen, P. Tension-free vaginal tape procedure without preoperative urodynamic examination: Long-term outcome. International Journal of Urology (2012) 19, 1003-1009
Hill. Histopathology of excised midurethral sling mesh. Int Urogynecol J (2015) 26:591-595
Hinoul, P. An anatomic comparison of the original versus a modified inside-out transobturator procedure. Int Urogynecol J (2011) 22:997-1004.
Huffaker. Histologic response of porcine collagen-coated and uncoated polypropylene grafts in a rabbit vagina model. Am J Obstet Gynecol 2008;198:582.e1-582.e7.
Iakovlev, V. Degradation of polypropylene in vivo: A microscopic analysis of meshes explanted from patients. J Biomed Mater Res Part B 2015
Iakovlev, V. Pathology of explanted transvaginal meshes. (2014)
Jacquetin, B., Total transvaginal mesh (TVM) technique for treatment of pelvic organ prolapse: a 3-year prospective follow-up study. Int Urogynecol J (2010) 21:1455-1462
Jamieson DJ and Steege JF. The Prevalence of Dysmenorrhea, Dyspareunia, Pelvic Pain, and Irritable Bowel Syndrome in Primary Care Practices. Primary Care Vol. 87, No. 1, January 1996
Junge. Mesh biocompatibility: effects of cellular inflammation and tissue remodeling. Langenbecks Arch Surg (2012) 397:255 270
Kahn, M. Posterior colporrhaphy its effects on bowel and sexual function. (1997)
Kao A, et al. Dyspareunia in postmenopausal women: A critical review. Pain Res Manage Vol 13 No 3 May/June 2008.
Karlovsy. Synthetic Biomaterials for Pelvic Floor Reconstruction. Current Urology Reports 2005, 6:376-384
Karram, M. Surgery for posterior vaginal wall prolapse. (2013)
Khan ZA, et al. Outcomes and complications of trans-vaginal mesh repair using the Prolift kit for pelvic organ prolapse at 4 years median follow-up in a tertiary referral centre. Arch Gynecol Obstet (2014) 290: 1151-1157
King, Goldman. Is there an association between polypropylene midurethral Slings and Malignancy? Female Urology (2014)
Klinge. Alloplastic Implants for the Treatment of Stress Urinary Incontinence and Pelvic Organ Prolapse. Hernia Repair Sequelae, Ch. 56, 2010.
Klinge. Do Multifilament Alloplastic Meshes Increase the Infection Rate? Analysis of the Polymeric Surface, the Bacteria Adherence, and the In Vivo Consequences in a Rat Model. J Biomed Mater Res (Appl Biomater) 63: 765-771, 2002
Klinge. Modified classification of surgical meshes for hernia repair based on the analyses of 1,000 explanted meshes. Hernia (2012) 16:251-258
Klinge. Shrinking of Polypropylene Mesh in vivo: An Experimental Study in Dogs. Eur J Surg 1998; 164: 965-969
Klosterhalfen. Biological Response to Mesh. Eur. Surg .. Vol. 35 . No 1 . 2003
Klosterhalfen. Influence of implantation interval on the long-term biocompatibility of surgical mesh. British Journal of Surgery 2002, 89, 1043 1048
Klosterhalfen. The lightweight and large porous mesh concept for hernia repair. Expert Rev. Med. Devices 2(1), 103-117 (2005)
Komesu, Y. Posterior Repair and Sexual Function. (2007)

Lamvu, G. Vaginal apex resection: A treatment option for vaginal apex pain. (2004)
Liapis, A. Long-term efficacy of tension-free vaginal tape in the management of stress urinary incontinence in women: efficacy at 5- and 7-year follow-up. <i>Int Urogynecol J</i> (2008) 19:1509–1512
Liebert. Subcutaneous Implants of PP Filaments. <i>J Biomed Mater Res</i> , Vol. 10, 939-951
Lin, A. In Vivo tension sustained by fascial sling in pubovaginal sling surgery for female stress urinary incontinence. <i>The Journal of Urology</i> . Vol. 173, 894-897 (2005)
Lo, T. Ultrasound assessment of mid-urethra tape at three-year follow-up after tension-free vaginal tape procedure. (2004)
Lowman JK, et al. Does the Prolift system cause dyspareunia? <i>AJOG</i> December 2008.
Lowman, J. Tension-free vaginal tape sling with a porcine interposition graft in an irradiated patient with a past history of a urethrovaginal fistula and urethral mesh erosion. (2007)
Lukacz ES, et al. The effects of the tension-free vaginal tape on proximal urethral position: a prospective, longitudinal evaluation. <i>Int Urogynecol J</i> (2003) 14:179-184.
Meschia, M. Multicenter Randomized Trial Of Tension-Free Vaginal Tape (TVT) And Trans-Obturator In-Out Technique (TVT-O) For The Treatment Of Stress Urinary Incontinence. <i>Int Urogynecol J</i> (2006) 17 (Suppl. 2):S57–S100
Miller, D., Lucente, V., Babin, E., Beach, P., Jones, P., Robinson, D. Prospective clinical assessment of the transvaginal mesh technique for treatment of pelvic organ prolapse-5-year results, <i>Female Pelvic Med. Reconstr. Surg.</i> (2011) 17(3):139-143
Moalli, P. Tensile properties of five commonly used mid-urethral slings relative to the TVT. <i>Int Urogynecol J</i> (2008) 19:655 663
Muhl. New Objective Measurement to Characterize the Porosity of Textile Implants. <i>J Biomed Mater Res Part B: Appl Biomater</i> 84B: 176-1 83, 2008
Nguyen J, Burchette. Outcome after Anterior Vaginal Prolapse Repair; A randomized Controlled Trial. <i>Obstet Gynecol</i>
Nieminen K. Outcomes after anterior vaginal wall repair with mesh: a randomized, controlled trial with a 3 year follow-up. <i>Am J Obstet Gynecol</i> 2010;203:235.e1-8.
Nilsson, CG. Eleven years prospective follow-up of the tension-free vaginal tape procedure for treatment of stress urinary incontinence. <i>Int Urogynecol J</i> (2008) 19: 1043-1047
Nilsson, CG. Seventeen years' follow-up of the tension-free vaginal tape procedure for female stress urinary incontinence. <i>Int Urogynecol J</i> (2013).
Ogah, J. Minimally invasive synthetic suburethral sling operations for stress urinary incontinence in women: a short version <i>Cochrane Review. Neurourology and Urodynamics</i> 30:284-291 (2011).
Olsson, I. Long-term efficacy of the tension-free vaginal tape procedure for the treatment of urinary incontinence. <i>Int Urogynecol J</i> (2010) 21:679–683
Ostergard. Degradation, infection and heat effects on polypropylene mesh for pelvic implantation: what was known and when it was known. <i>Int Urogynecol J</i> , 2011
Ozog. Shrinkage and biomechanical evaluation of lightweight synthetics in a rabbit model for primary fascial repair. <i>Int Urogynecol J</i> (2011) 22:1099 1108
Pandit, L. Postmenopausal vaginal atrophy and atrophic vaginitis. (1997)
Pascual. Early tissue incorporation and collagen deposition in lightweight polypropylene meshes: bioassay in an experimental model of ventral hernia. <i>Surgery</i> 2008;144:427 35
Poandl. Contracture Study (2012)
Richter, H. Retropubic versus Transobturator Midurethral Slings for Stress Incontinence. <i>n engl j med</i> (2010) 362;22 p. 2066-
Scheidbach. In vivo studies comparing the biocompatibility of various polypropylene meshes and their handling properties. <i>Surg Endosc</i> (2004) 18: 211 220
Schumpelick. Light weight meshes in incisional hernia repair. <i>J Minim Access Surg.</i> 2006 September; 2(3): 117–123.
Serati, M. Tension-free Vaginal Tape for the Treatment of Urodynamic Stress Incontinence: Efficacy and Adverse Effects at 10-Year Follow-Up. <i>European Urology</i> 61 (2012) 939– 946
Serati, M. TVT-O for the Treatment of Pure Urodynamic Stress Incontinence: Efficacy, Adverse Effects, and Prognostic Factors at 5-Year Follow-up. <i>European Urology</i> 63 (2013) 872-878
Sivaslioglu AA. A randomized comparison of polypropylene mesh surgery with site-specific surgery in the treatment of cystocele. <i>Int Urogynecol J</i> (2008) 19:467–471

Smith, T. Pathologic Evaluation of Explanted Vaginal Mesh: Interdisciplinary Experience From a Referral Center. Female Pelvic Med Reconstr Surg 2013;19: 238-241
Sobhgol SS, Charndabee SMA. Rate and related factors of dyspareunia in reproductive age women: a cross-sectional study, Int. J. Impot. Res. (2007) 19(1):88-94
Sokol A. One-year objective and functional outcomes of a randomized clinical trial of vaginal mesh for prolapse, Am J Obstet Gynecol. 2012 Jan;206(1):86.e1-9
Stanford EJ. Traditional native tissue versus mesh-augmented pelvic organ prolapse repairs: providing and accurate interpretation of current literature, Int Urogynecol J (2012) 23:19-28
Stumpf. Open Mesh Repair. Eur. Surg .. Vol. 35 . No 1 . 2003
Su T. Impact of Prolift procedure on bladder function and symptoms in women with pelvic organ prolapse, Int Urogynecol J (2011) 22:585-590
Svenningsen, R. Long-term follow-up of the retropubic tension-free vaginal tape procedure. Int Urogynecol J
Svenningsen, R. Risk Factors for Long-Term Failure of the Retropubic Tension-Free Vaginal Tape Procedure. Neurourol. Urodynam. 2013 Wiley Periodicals, Inc
Tincello. The TVT Worldwide Observational Registry for Long-Term Data: Safety and Efficacy of Suburethral Sling Insertion Approaches for Stress Urinary Incontinence in Women. J Urology, Vol. 186, 2310-2315, December 2011
Tommaselli, G. Comparison of TVT-O and TVT-Abbrevio for the surgical management of female stress urinary incontinence: a 12-months preliminary study. International Journal of Gynecology & Obstetrics 119S3 (2012) S261–S530
Velemir. Transvaginal mesh repair of anterior and posterior vaginal wall prolapse: a clinical and ultrasonographic study. Ultrasound Obstet Gynecol 2010; 35: 474–480
Walters. Which Sling for which SUI Patient. OBG Management, Vol. 25, No. 5, pg. 28-40
Waltregny, D. New Surgical Technique for treatment of stress urinary incontinence TVT-Abbrevio: from development to clinical experience. (2012). (Gynecology) Surgical Technology International XXII.
Wang, A. A histologic and immunohistochemical analysis of defective vaginal healing after continence taping procedures: A prospective case-controlled pilot study. American Journal of Obstetrics and Gynecology (2004) 191, 1868-74
Weber, A. Sexual function and vaginal anatomy in women before and after surgery for pelvic organ prolapse and urinary incontinence. (2000)
Withagen M, et al. (2010). Does trocar-guided tension-free vaginal mesh (Prolift™) repair provoke prolapse of the unaffected compartments? Int Urogynecol J 21: 271-278
Withagen M. Risk Factors for Exposure, Pain, and Dyspareunia After Tension-Free Vaginal Mesh Procedure. Obstet Gynecol 2011;118:629-36
Withagen M. Trocar-Guided Mesh compared With Conventional Vaginal Repair in Recurrent Prolapse. Obstet Gynecol 2011;117:242–50
Woodruff. Histologic Comparison of Pubovaginal Sling Graft Materials: A Comparative Study. UROLOGY 72: 85–89, 2008
Zyczynski, H. Sexual activity and function in women more than 2 years after midurethral sling placement. Am J Obstet Gynecol 2012;207:421.e1-6
Linder B et al. Evaluation of the local carcinogenic potential of mesh used in the treatment of female stress urinary incontinence. Int. Urogynecol. J. 2016 [Epub ahead of print].
King AB, et al. Is there an association between polypropylene midurethral slings and malignancy? Urology. 2014 Oct; 84(4):789-92.
King AB, Goldman HB. Current controversies regarding oncologic risk associated with polypropylene midurethral slings. Curr Urol Rep. 2014 Nov; 15(11):453. PMID: 25234187.
Moalli P, Brown B, Reitman MT, Nager CW. Polypropylene mesh: evidence for lack of carcinogenicity. Int Urogynecol J. 2014 May; 25(5):573-76
Ubertazzi EP et al. Transvaginal mesh (TVM) five years follow up: a retrospective study from LATAM. Int. Urogynecol. J. 2015; 26(Suppl 1): S50-S151.
Maher CF et al. Transvaginal mesh or grafts compared with native tissue repair for vaginal prolapse (Review). Cochrane Collaboration 2016.

Maier CF et al. Laparoscopic sacral colpopexy versus total vaginal mesh for vaginal vault prolapse: a randomized trial. Am J Obstet & Gynecol 2011;204:360.e1-7.

Document Description [Bates Range]

(1992) 7 Year Dog Study, Prolene Sutures [ETH.MESH.05453719-27]
(2001) 91-day Tissue Integration PowerPoint [ETH.MESH.02319001]
(2007) 13 Week PSM study on Contracture and Integration in Swine Models [ETH.MESH.00514908-21]
(undated) Mesh Structure Table [ETH.MESH.02212840-42]
[ETH.MESH.10665538-65]
Clinical Expert Report [ETH.MESH.01784823]
ETH.MESH.02229057
ETH.MESH.02229059 - Abbrevio placement
ETH.MESH.02229064 - TVT-O placement
Ethicon Final Report, PSE Accession No. 00-0035, An Exploratory 91-Day Tissue Reaction Study of Polypropylene-Based Surgical Mesh in Rats (PSE ACC. No. 00-0035) [ETH.MESH.01425079-113]
Ethicon Final Report, PSE Accession No. 02-0579, Project No. 48010 [ETH.MESH.05316775-812]
Ethicon Final Report, PSE Accession No. 97-0197, Project No. 16672 [ETH.MESH.05315252-65]
Ethicon Report Memo, 07/29/1997, PSE Accession NO. 97-0128, Project No. 16672 [ETH.MESH.07510200-07]
History of TVT
History of TVT-O
IFU [ETH.MESH.02341203-02341267]
Memo dated March 6, 2006 [ETH.MESH.01222075-79]
TVT-O IFU [ETH.MESH.02340902-73]
TVT-O IFU [ETH.MESH.02340974-1046]
Proxima IFU [ETH.MESH.02341398-453]
TVT-S IFU [ETH.MESH.02340568-755]

PROLIFT IFU

TVT-Abbrevio IFU

TVT-Exact IFU

Publically Available

(1990) FDA Reclass on Polypropylene Sutures
2011 AUA Position Statement on the Use of Vaginal Mesh for the Surgical Treatment of Stress Urinary
2013 AUA SUI Patient Guide
2013 AUGS Position Statement on Restrictions of Surgical Options forPFD FINAL
2013 Sept. NICE Guideline - The management of urinary incontinence in women
2015 ACOG AUGS Practice Bulletin 155
ACOG - (FAQ081) Patient Guide to Urinary Incontinence
ACOG (1995) technical bulletin. Urinary Incontinence. No. 213 - Oct. 1995 (Replaces No. 100, Jan. 19
ACOG (2005) Practice Bulletin 63 (Obstet Gyn) - Urinary Incontinence in Women
ACOG Patient Information Sheet (FAQ166) - Surgery for Stress Urinary Incontinence (2011)
AUA - Monograph on SUI (2011)
AUGS SUFU Patient FAQs MUS for SUI - March 12, 2014
AUGS SUFU Provider FAQs MUS for SUI - March 12, 2014
AUGS-SUFU (2014) - Position Statement
AUGS-SUFU MUS Position Statement Approved - 2014
AUGS-SUFU MUS Position Statement APPROVED 1 3 2014
British Association of Urological Surgeons - BAUS - Synthetic Vaginal Tapes for Stress Incontinence
FDA 3 27 2013 Position Statement re Considerations about Surgical Mesh for SUI
FDA_24 Hour Summary
FDA_Executive Summary
FDA_Presentation - SUI - Pressley
ICS_Factsheets_2013_Edition - SUI - p 13 Midurethral sling the choice
IUGA (2011) - Stress Urinary Incontinence A Guide for Women
Lucas 2012 - EAU Guidelines on Surgical Treatment of Urinary Incontinence - Midurethral sling
www.augs website 2014 Mar 12 - AUGS SUFU FAQs for Patients and Providers re MUS for SUI
Other
(2001) 91-day Tissue Integration Study
(December 2015) Scenihhr Report - The Safety of Surgical Meshes Used in Urogynecological Surgery

Expert Reports

Final Vladimir Iakovlev Wave 1 General Report with attachments - 1.29.2016 (Received 2.1.2016)

Expert Reports

Iakovlev, Vladimir (General) - 1.29.2016

Allison, Kimberly (General and case specific) - 2.1.16

Exhibit C – Testimony History in Last 4 Years

Donna Andrusky Bubnick v. Mark H. Stoler, M.D., Anne M. Stowman, M.D. and University of Virginia Health Sciences Foundation; Circuit Court for the City of Charlottesville, Charlottesville, Virginia

Reineberg v. Verde Valley Medical Center, Arizona Superior County Court, Yavapai County, March 2013

Perry v. Ethicon et al. – Kern County, California, December 2014

Carlino v. Ethicon et al. – Philadelphia County, Pennsylvania, January 2016